BUSINESS WEEK

OCT 15 1929

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that can be made in Kansas City

AN OPPORTUNITY for manufacturers in 212 lines of business . . . an opportunity in the center of a market of 21 million buyers who can be served most economically from Kansas City!

That is this city's offer of opportunity to established manufacturing enterprises, seeking wider markets.

Practically every industry is represented in these needs of a major metropolitan area which utilizes these 212 products in volume . . . but must buy them in other markets.

Yet every one of them may be manufactured or processed here profitably!

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The Business Week

WITH WHICH IS COMBINED THE MAGAZINE OF BUSINESS

A JOURNAL OF BUSINESS NEWS AND INTERPRETATION

FOR THE WEEK ENDING
OCTOBER 12, 1929

Business Outlook—Generally Fair, Slightly Warmer

THERE is so far no evidence, either in the statistical barometers or trade sentiment, of any general or unnatural slump in business. What is happening is apparently only a gradual readjustment of the automobile-building-steel group of industries back to a more normal level of activity following a long period of unseasonable or excessive expansion.

Even this applies chiefly to the automobiles, tires, oil, and accessories group, which have been going a little too fast for the consumer and are normally in their slack season, anyway, at this time of the year. The slump in construction also is mainly in residential building. Steel business is being sustained on about as high a level as last year by steady and widely varied demand from other lines of construction and manufacturing, which continue normally active. Railroad movement of commodities is high and general trade remains good.

In certain lines of business and in price levels the expected effects of a long period of high money rates are beginning to show themselves more clearly—particularly in residential building, in the replacement and extension of plant equipment, and in the marketing of grain and cotton.

Money was temporarily and circumstantially easier last week, but the credit outlook will remain uncertain and unfavorable until further decline in price levels here and abroad, with threat of business recession, brings about a change in banking policies. This will probably not be possible until the stock market readjustment now going on here is completed.

But these things are transient and trivial in face of the confidence in international stability and co-operation inspired by the meeting of the heads of the two greatest industrial nations in the world, one representing the ideals of business, the other those of labor, both seeking a path to peace and prosperity for their people and for the world at large.

Premier and President Talk It Over

THE world now knows, even slightly skeptical France now sees, that the visit of Premier MacDonald to this country and to Canada is a symbolic event some day to be recalled as a milestone in world history. Here what is solemnly called statesmanship and what is candidly called salesmanship have been fused into something new and important in international affairs—a spirit and act of practical idealism. Nor is this merely international in its significance, for Hoover and MacDonald are not only leaders of the two greatest industrial nations of the world. They are representatives of the two great forces in the world everywhere. One embodies in his person and his past the principle of business leadership, the other the philosophy of labor.

Not today or tomorrow only, but always, business is profoundly and subtly affected by such things. Business today is

no longer just business. It lives—or dies—in the atmosphere created by hopes or fears, passions or prejudices of nations and classes. Anything that clears this atmosphere strengthens and inspires the world everywhere in its task of making a living.

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There'll Be No New Tariff, Senator Predicts

AN OUTSTANDING Democratic Senator tells THE BUSINESS WEEK:

"No tariff bill continuing the power the President now has to change duties by proclamation, can be passed during the special session of Congress. A bill perpetuating the present form of tariff flexibility may be passed during the regular session, but even this is doubtful.

"Seven to ten Senators easily can prevent the passage of a bill perpetuating the present flexibility. There are undoubtedly more than ten ready to talk to death any bill of the kind, no matter what else the bill may contain. A small minority filibuster could be beaten by cloture. But this would require a two-thirds vote, which I am sure cannot be procured, even were administration forces willing, which I doubt, to bring about final passage of the bill that way.

"Without perpetuation of present flexibility, a tariff bill very probably can be passed before the regular session begins. My opinion is that the administration forces will prefer no bill to one eliminating present flexibility."

The Senator says that in all probability rate swaps can overcome the coalition majority of five for the Simmons substitute flexibility provision. He is confident, however, that 32 Senators will stand for that substitute to the bitter end. Thirty-two would be sufficient to block cloture. He believes that at least 32 will hold out against Presidential flexibility through, if need be, the regular session—though he says "anything might happen if the tariff discussions go that far."

It is probable, he thinks, that the House will stand firmly against the Simmons substitute and that a majority of the Senate will be, in the end, favorable to its elimination. But he believes that there will be enough Senators for it to prevent success of any conference with the House. He is also of the opinion that numerous regular Republicans will be stubbornly for present flexibility, preferring that there be no bill to one containing the Simmons substitute.

His conclusion is that no bill will be passed at the special session, nor probably at the regular session.

▼

Farm Board's Plans On Trial in Canada

WHILE the Farm Board at Washington is attempting to work out a program of agricultural relief based upon the principle of marketing pools, a crisis has arisen in Canada which throws into sharp relief the perils of any such attempt to regulate prices.

The Canadian wheat pool holding for higher prices, has met a buyers' strike.

Terminal elevators at Great Lakes and St. Lawrence ports are crammed with grain. More than 200 vessels loaded with wheat are unable to move from Canadian ports. Canadian railroads are rationing cars to prevent an embargo. A complete stoppage of wheat movement is in prospect.

It is a battle of the organized farmers through their co-operative marketing organization against the shrewdest buyers of the old world, who think they can fill their needs from sources other than Canadian until the new Argentine crop is available.

The Canadian wheat pool contends that the high-grade, high-protein Canadian wheat is needed to mix with the low quality wheat; that there will be only 150,000,000 bushels of Canadian wheat for export; that Canada will not be forced to sell at the low prices Europe is paying for Argentine grain.

If the pool is right, there is bound to be a world shortage as against world needs, and their trump card will pay heavy returns. If the European buyer can supply needs elsewhere, consequences to the pool may be profound.

Carrying wheat is an expensive program. E. B. Ramsay, wheat pool manager, says the Canadian wheat income will be $198,000,000 less than in 1928, with a total estimated at $298,000,000.

In the meantime the railroads, steamship companies and general business throughout Canada are being seriously hampered while the wheat pool marketing program is on trial.

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Mellon To Remain In Hoover Cabinet

THE White House announcement of Mr. Mellon's plans to remain in office throughout the present Hoover administration is most unusual. But it will end months of rumors circulated purely with the intention of unsettling finance, particularly the stock market. Even his most severe critics know that Mellon's presence in the cabinet is an asset to business, at least a psychological asset. His departure would be an unsettling force of grave importance.

Circulation of rumors of Mellon's resignation for the last eight months has been despicable. That some high sources have been responsible makes it worse. The effort was not primarily aimed at Mr. Mellon. The intention was to unsettle the stock market. Washington correspondents for days at a time have been forced by the repetition of the rumor to deny that the Secretary intended to resign. Mr. Mellon once humorously said that he had become "resigned about being resigned."

Four tax reductions, with lately talk of a fifth, have endeared Mr. Mellon to business. A big business man himself, big business looks to him as one sure friend in Washington.

Cartel Movement Continues Abroad

PROPHECIES of the failure of the cartel method of controlling production in European industries are not being realized. Despite the difficulties that have threatened to disrupt some of these European industrial combinations in recent years, the cartel movement is being maintained and is slowly spreading to new lines of business. Almost every important European industry is involved in some sort of international agreement, and some observers see in this tendency the practical, concrete basis for the European Federation for which Mr. Briand made a little propaganda recently.

Last week another great European cartel was announced. A preliminary agreement has been reached by Belgium, France, Germany, Switzerland and Czecho-Slovakia for the manufacture of locomotives. Another is in process of formation covering the production and sales of railway rolling stock.

There have been reports of the imminent disruption of the great European steel cartel which was formed by France, Germany, Belgium, Luxembourg, the Saar, Austria, Hungary and Czecho-Slovakia in 1926. Under this agreement the production of steel in these countries has been regulated more or less by a quota system from year to year, each country being allowed to produce a fixed proportion of the total—Germany about 43%, France 31%, Belgium 11%, Luxembourg 8%, the Saar 6% and the others smaller fractions. All participants except Germany are obliged to pay a fine of $4.00 for each ton produced in excess of the quota, and receive a certain bonus for production below the quota.

By special arrangement, Germany pays $4.00 a ton on the excess production for export and $1.00 per ton on the excess of home consumption. In most years except toward the end of 1928, Germany has been producing, regularly, more than her quota, and France less. This situation led to persistent demands by Germany for revision of the quotas, and some slight modification was made in Germany's favor. German steel production itself is thoroughly controlled by a national cartel or trust, and there have been threats that Germany would break away from the international cartel unless her demands were met. Italy has never joined the cartel, but recently succeeded in forming a national cartel of her own.

The latest news is that, despite these difficulties, the present agreement, under which steel production of the countries in the cartel is limited to 32,287,000 tons per annum, will be extended to March 31, 1930. An additional important feature of the recent conference on this subject at Vienna is the plan to establish, for the first time, a co-operative sales agency to divide up the foreign market and exploit it more intensively. Statistics on international consumption and exports of steel are to be gathered as a basis for more scientific allocation of production and sales, and the sales agency is expected to begin work next year.

Although American exports of iron and steel products declined sharply in August, there is no evidence that these European combinations have had any influence in retarding American foreign trade in steel in recent years. Their strengthening, however, may hold some threat for the future. The United States has its own little steel cartel, formed as an export association under the Webb-Pomerene Act by the Bethlehem and United States Steel Corporation, a combination which would be a formidable competitor of any European.

▼

Bankers Loan On Farm-Stored Wheat

NORTH DAKOTA is trying an interesting experiment looking toward more orderly marketing of grain. Northwest bankers, both commercial and Federal Reserve, are backing the attempt.

The novel plan of loans against grain stored on the farm has been enacted into state law. State officials test and grade the grain and issue certificates against it. When fully covered by insurance, for which a nominal charge is made, the certificates become negotiable.

The Minneapolis Federal Reserve bank will rediscount these grain storage certificates. Gov. Shafer has conferred with bankers in northwestern cities, and is said to have found excellent response. The badly congested condition of Northwest elevators lends great strength to such a plan.

While still in the early experimental state, such a plan contains great possibilities. The increased stability to business through a more orderly marketing process offers much. The cooperation of bankers in making loans on home-stored products will lend much to its chances of success.

▼

Europe Fears Ford Wages

EUROPEAN employers are beginning to look askance at Henry Ford's wage theories. They have no objection to his automobiles, his factories or to stock in his company, but they are becoming afraid that his proposal to pay the European equivalent of American wages will disturb the industrial balance and make European workers restive.

It has been known that European manufacturers abroad have been rather cool toward the Ford idea since he proposed, early this year, to pay Ford workers in European factories a scale of money wages which would make their purchasing power or real income equal that of Ford workers at home. There has been no definite expression of protest until

last week, when a French employers' representative at a meeting of the governing body of the International Labor Office at Geneva made an emphatic speech against the proposal.

Mr. Ford had asked the International Labor Office, which is part of the League of Nations, for information about the cost of living as a basis for determining what wages to pay in the 17 European cities where he has or will soon have plants. The Labor Office said that it had no sufficiently comprehensive or accurate information of that kind, nor the money to obtain it. Thereupon, Mr. Edward A. Filene, Boston merchant and League enthusiast, volunteered to raise the money for an investigation, partly out of his own pocket.

The International Labor governing body is composed of representatives of employers, governments and labor, and these three have not seen the Ford proposal in the same light. Internal politics have delayed action on Mr. Filene's offer, but the investigation is to be begun soon, starting in Detroit.

Back of this question is the broader one of the policy to be pursued by American concerns operating abroad. So long as tariffs and immigration restrictions obstruct the free international movement of goods and labor nothing can prevent the free movement of capital from one country to another. That is how the other restrictions are offset and compensated for. In the long run, however, nothing is gained by American money or American factories going abroad to work if they go merely to take advantage of an immediate and temporary differential in wages or other costs. The interests of American business and of labor at home are damaged unless the exportation of capital increases foreign purchasing power. As it does, the differential in real wage levels is gradually closed up to the advantage of all countries.

This is what has distinguished Mr. Ford's policies abroad from those of many other American concerns. He is evidently trying to make his plants industries of the country in which they are, rather than branches of an American industry, by financing them within the country, leaving the profits largely there, and paying wages which add to the purchasing power of the native labor. This seems philanthropic at present but in ten or twenty years it may look like good business, even to European employers, who now feel about it as Americans did about Ford's $5 wage a few years ago.

▼

World Credit Tangle No Nearer Solution

THE tangled world credit situation, with New York as the spider in the center of the web, is feeling new and hardly favorable forces. The havoc wrought on foreign monetary affairs is a well-known story, with the Bank of England rate increase as the culmination. Things are happening in America which are not yet serious, but unfavorable.

The Federal Reserve by raising the New York discount rate and lowering the bill rate in early August attempted to "conserve" its resources. Approximately two months have elapsed. The result is a sucking of domestic credit into New York just as foreign funds have been drawn here. This has tended toward tightening of credit in other parts of the country and easing it in New York —the exact reverse of what is desired.

Gold has moved to New York in large volume from other Federal Reserve districts as well as from abroad. The movement is partly seasonal, due to fall buying and crop moving. Differential of 1% in the New York bank rate over the rate at other Reserve banks, plus continued demand for speculative credit is a large factor. The New York Reserve bank now has gold $250,000,000 in excess of the amount it held when its discount rate was increased. The Boston bank shows a trivial increase as does Dallas. The other banks have lost gold in substantial amounts.

Borrowing from the Reserve banks to meet autumn business demands naturally takes place in this period. The gold lost to New York has had to be made up by an extension of Federal Reserve credit. Thus the seasonal trend toward heavier borrowing has been accentuated in other Reserve districts by New York's taking of gold. Chicago, Cleveland and San Francisco, the country's secondary financial centers, have shown particularly heavy increases in borrowing and losses of gold.

The Reserve system has been buying bills of bankers' acceptances to help. While every one of the Reserve banks shows an increase of such holdings, the New York bank has purchased as much as all of the rest of the banks together. This acts as a compensating factor for the gold drawn, but it tends to put the greatest emphasis on easing in New York, where it is an advantage to the stock market and the financial world, rather than to the agricultural and industrial districts where the autumn demand primarily takes place.

Developments of the two-month period are summarized in the showing of the reserve ratios of the various banks. The ratios have moved downward in every case excepting New York and Dallas. The Dallas change has been slight. At New York the ratio has moved upward strikingly.

Imports of gold, heavy this year, have recently begun to fall off. With the recent increase in foreign bank rates and the trend toward repatriation of foreign capital, gold imports into the United States may cease. New York might even be called upon to send gold abroad if the move is carried much further.

Business activity in the United States is tending to decline. Federal Reserve practice under that condition heretofore has been to ease money rates, principally through lower rediscount rates. Patently, the other Reserve banks can not reduce their rates and widen the differential between themselves and New York. A lower rate in New York, even a decrease of ½% would almost certainly mean an outflow of gold to foreign countries. And that action would still leave New York with a rate above the 5% level of the other 11 Reserve banks.

Thus when the time comes for a redistribution of the nation's gold, or when business needs dictate lower money rates, difficulties are in prospect. Either New York will be seriously discomfited by a heavy outflow of gold or it will be forced to maintain a high enough rate to prevent that action. The free and unhindered movement of gold, the basis of all credit, is a basic principle of the financial setup in the United States, and essential to business. The elements of an unpleasant situation seem in the making.

CARELESS DRIVING?

Distribution ▶

Billboards Ask "How's Your Sofa?"

A $4,000,000 four-year national advertising campaign by the newly organized furniture industry has started. Women are to be made "furniture conscious."

Four hundred manufacturers and 1600 retailers are enrolled as contributors, the new Simmons-Berkey & Gay combination among the five leading furniture manufacturers heading the list. Local tieup advertising by individual retailers will aggregate several millions more.

A volume, "Why People Don't Buy Furniture," result of a personal canvass of 1,600 furniture merchants, 2,147 store salesmen and 48,600 homes, tells (at $10 a copy) what is wrong with the industry. Furniture prices have slumped 18.8% since 1923. The average family spends $145.37 a year (wholesale) for automobiles; $39.46 (wholesale) for furniture. A dollar down and a dollar a week from each family would buy at retail all furniture sold. Furniture is our twentieth manufacturing industry, $868,-145,000 in 1925.

People have not been buying furniture because:

1. Homes have been getting smaller and smaller, hours spent in them fewer and fewer.

2. Money has been spent outside the home on automobiles, tours, theatres. Inside the home on radios, which are almost furniture, and automatic refrigerators.

Billboards will be asking embarrassing questions for at least four years:

"Would you drive an automobile as old as your parlor sofa?"

"Would you wear a gown as out-of-date as your dining-table?"

"Are your home furnishings a handicap in meeting friends?"

Fred Millis, advertising man, is in charge. A specialist in advertising by industries, he popularized "Say it with Flowers." Slogan for the new campaign, however, will not be "Say it with Furniture," but "First furnish your home. It tells what you are."

Fashions tend to seep slowly into general public approval. Manufacturers producing for mass demand usually find their best market by keeping just one jump ahead of the spread of fashion. Only those who supply the small group of innovators can afford to be too far ahead of fashion. The failure of mass producers to realize this in the past has given impetus to the establishment of hundreds of small furniture makers, scattered over the land, making Colonial reproductions to fill the local demand. They have cut seriously into the business of mass suppliers.

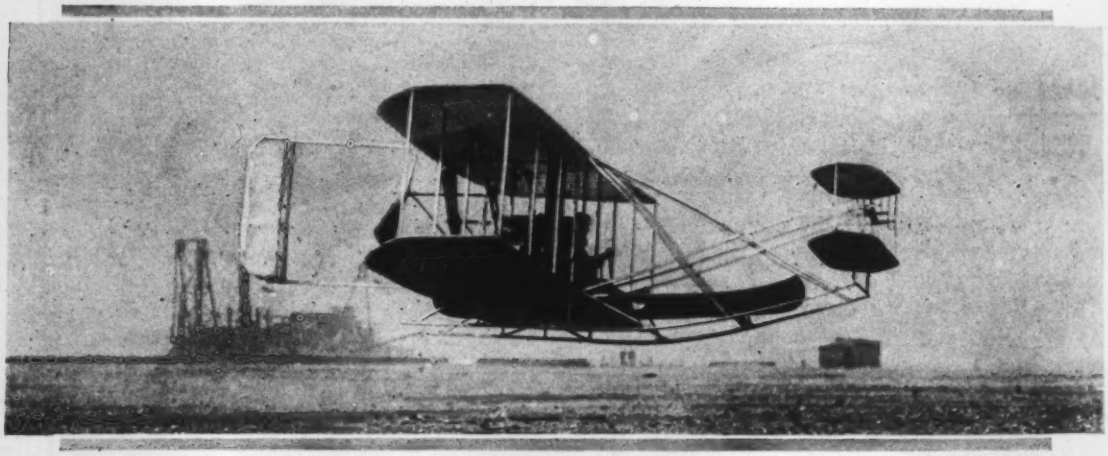
The present attempt of the furniture manufacturers to turn aside or to speed up the natural trend of fashion will be watched with interest. Its effect on the small groups among whom fashions usually originate also will claim especial attention from dress designers, who are eagerly studying the group psychology of fashion.

Distribution ▶

Chain Questions Bedaze Merchant

THE Federal Trade Commission, which has now turned its hand to investigation of the competitive impact of the chain store, has forwarded a 22-page questionnaire to some 50,000 retail dealers throughout the country. If the Commission could, by some miracle, gather all of the information that the questionnaire is designed to elicit, Congress would certainly know all about the chains. But the questions are so extraordinary, and so complicated, that only a small minority of merchants will be able to answer them. Only a careful analysis over a long test period would divulge most of the information requested. However, the Commission believes that a relatively small number of returns will permit general conclusions which will satisfy Congress.

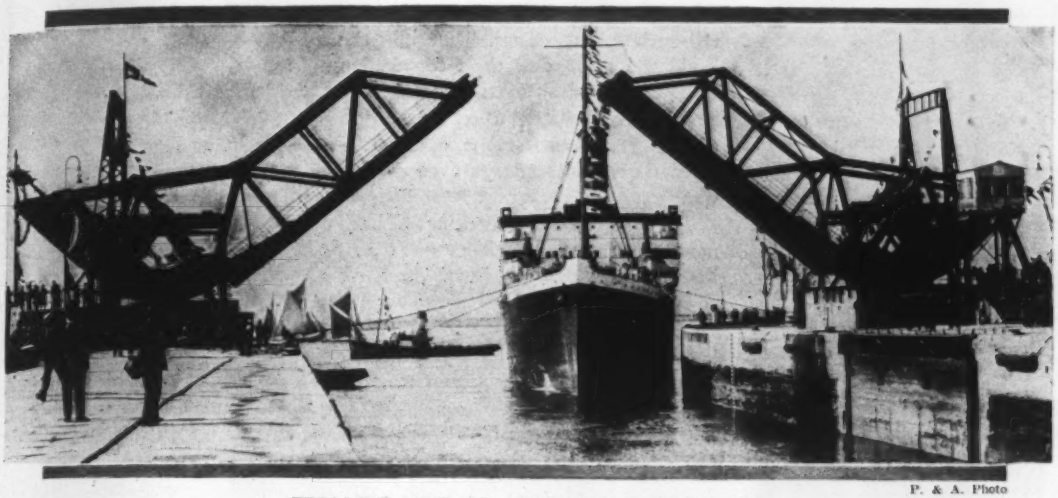
The questionnaire is intended to trace the transition in the business of the independent retailer since 1922, and the part played in the transition by the chain store. The dealer is asked to report how many direct competitors, chain and independent, in his neighborhood, and how many there were in 1922 or in any subsequent year since his location. He is asked to give the distance to such stores in all directions. He is asked to give a detailed explanation of whether his store has been affected favorably or unfavorably by increasing competition. Has he compared prices of advertised articles in chain stores with his own prices for



International Photo

IT'S AN AIRPLANE!

Even if it doesn't look much like it. Wilbur Wright making the first flight in New York, just twenty years ago, from Governors Island to Grant's Tomb, and back



P. & A. Photo

THAMES MUD FLATS NOW DRY DOCK

Lady Ritchie, on Orient Liner Oronsay, opens new extension to Tilbury Docks, recently built at cost of £16,000,000. The docks are now large enough to accommodate any liner; have devices new to shipping men

the same articles? Are the chain stores regularly lower in price than his own store? By what percentage do the chain stores undersell him on advertised leaders, specials, or other articles? What is his opinion regarding the policies of competing chain stores concerning prices, use of leaders, quality of goods handled, services rendered? And so on—

The questionnaire also contains innumerable questions relating to business methods. They concern store hours, method of paying employees, number of sales a week, amount of average sale, service furnished to customers, percentage of telephone orders, percentage of dealer purchases upon which cash discounts were taken.

And so on, ad infinitum. And while the dealer stands scratching his head, undecided whether to close his business for a few years and so find time to answer the questions, or go ahead and make a living, the Commission may complain again that it receives no co-operation from the ungrateful merchants whom it is trying to help.

Retailing ▶

Ensemble Idea Reaches the Male

THE man of fashion is approaching the goal toward which window display and advertising have been leading him for two years. He has begun to buy large numbers of ensemble sets: suit, shirt, tie, hose, handkerchief, and garters in appropriate color and pattern combinations. Some men's chain stores report that one-third of the customers buy three articles in combination, while one-fifth buy complete sets.

At present, selling ensembles is entirely a retailer's game. He buys from different sources, and does his own matching. The results sometimes are, to say the least, unusual. An extension of the idea, which is expected, would eventually compel the converters to assemble combinations and pass them on through the wholesaler to the retailer ready for display and sale.

Distribution ▶

Knit Wear Folk Want a Code

THE Federal Trade Commission has called an early conference of manufacturers of knitted outerwear, at their request, hoping for the adoption of an agreement to eliminate various unfair trade practices. The meeting is expected to represent 35% of the sales volume of the industry. There will be discussion of, and perhaps action on, style piracy, misbranding, misrepresentation, price discrimination, guaranteed prices, terms of sale, selling below cost, sanctity of contract, samples and arbitration.

It is interesting to note that industries are splitting now on differences of market rather than on differences of materials. Whereas the older weaving textile industries are split into cotton mills, woolen mills, and silk mills, the newer knitting industry has divided by quite natural development into the knitted outerwear, knitted underwear, and hosiery trades. Each of these divisions uses all kinds of textile fibres.

Trade practice meetings of belting and sole leather people and Southern hardware jobbers also are in prospect.

Marketing ▶

Food Merger Brings Dated Coffee

ONE of the first fruits of the Standard Brands, Inc. food merger is dated coffee. Chase and Sanborn Co. avails itself of the speedy distribution organization of the Fleischmann Yeast Co., dates its ground coffee, and makes semi-weekly deliveries in eastern Massachusetts. The housewife may have the same assurance that her coffee is fresh as that her yeast cakes and her eggs are fresh.

Distribution ▶

Soap Box Wagon Attains Dignity

MERCHANDISING establishments, hitherto at a loss to dispose of their old boxes, have taken the advice of the National Committee on Wood Utilization, of the Department of Commerce, and are building goodwill by advertising that whoever can use the boxes may have them.

Both adults and boys want them, boys especially, and the resulting eagerness to build the things described in the Committee's booklet "You Can Make

Keystone View

AN AMERICAN IDEA

Germany, like the United States, picks its Minister of Commerce for promotion. Dr. Julius Curtius becomes provisional Minister of Foreign Affairs, succeeding Stresemann.

It," has resulted in an increased demand at hardware and paint stores for bolts, tools, screws, nails and similar items. Boys' organizations, newspapers, and clubs are sponsoring local contests based on the booklet, and a state-wide competition has been undertaken by the Boy Scouts in Florida.

Number of requests for the booklet has been surprising, and again reveals that there is a large, unsatisfied demand for supplies and equipment from a market which is not taken seriously enough. A fortune may await the man who can supply a chassis for a boy's wagon which will accommodate a grocery box body and be strong enough to stand boys' usage.

Distribution ▶

Census Needs Everyone's Help

THE Census Bureau is now planning the administration of the census of distribution. It presents more different kinds of problems, perhaps more difficult problems, than any other part of the Census.

It is the first of its kind. The kind of questions to ask must be decided. The merchants and business people who must supply the information have never been asked before (except in 11 cities) to tell such intimate facts. They must be "sold the idea" that their cooperation is necessary. Many of them, too, must be educated to keep their records so that they can answer the questions—often they cannot answer even if they want to.

Then the research statisticians of business must be educated. They don't realize the enormous problems. They ask and expect too much.

Finally there are organization problems. It is always difficult to start something new from within an old organization.

Distribution ▶

Compromise On Paint Guarantees

THE Bureau of Standards has decided to prepare a separate list of paint and varnish manufacturers who are willing to certify to contract purchasers that their products comply with Federal Specification Board requirements, and eliminate their names from the general directory of manufacturers who are willing to sell on Board specifications. The Bureau plans to distribute the special list to trade associations, technical societies, and other interested organizations, and on request, to a relatively small number of firms and individuals. The general directory has been sent to Federal, state, county and municipal institutions and agencies.

The decision of the Bureau is expected to overcome objections which have been advanced by the certification committee of the American Paint & Varnish Manufacturers' Association. Originally the certification scheme was planned to extend to over-the-counter sales to the individual consumer buying small quantities for household use. The paint industry opposed this step on the ground that the plan would emphasize government specifications to the detriment of the manufacturer's name, and that ultimately paint and varnish would be purchased by government label and not by trademark. It was also pointed out that conformity to standard specifications would eliminate the incentive to find something "cheaper but just as good," which is the heart of competition. And unless we are to have free competition we probably would get along better with a regulated government monopoly.

Keystone View

GREAT MOTHER, GREAT SON

John Fritz Gold Medal, prized award of Engineers, to Ralph Modjeski, son of Helen Modjeska, famous actress. He was identified with building of Manhattan, Camden-Philadelphia, and other great bridges

Distribution ▶

States to Decide on Prison Goods

THE committee appointed in 1925 by Mr. Hoover as Secretary of Commerce, to study prison industries and their effect on free industries at last has reported. Prison products break market prices. They do more damage that way than by displacing products of free industry. The problem is to keep prison products from direct competition on the open market. One way perhaps might be to identify the prison products so they would be recognized as such by purchasers. Another way would be to take them off the open market altogether by selling prison-made products only to federal, state, and county institutions. The majority of the committee seemed to favor the latter alternative.

It is a state problem. In recognition of this, Congress passed a bill last spring requiring all prison products in distribution to conform to the laws of the state in which they are sold. That law enables each state to work out its own solution. One state may require labels—then all products from whatever prison must be labelled. Another permits only "state use"—then no prison-made goods

may come into that state except to be used by some governmental institution.

The law will affect prisons in nearly all states that now permit their products to be sold in the open market because almost all goods of that nature are sold through New York City. And New York State has a "state use" law, permitting the sale of prison products only for government use. So, many prisons will have to change their work programs—must build new factories, perhaps—and get different equipment. Congress gave them five years to get ready. The new law goes into effect in March, 1934.

Some prison officials are disturbed because they have put their prisons on a self-supporting basis by making work shirts. Work shirts have to be sold to the public. "State use" markets are hardly sufficient to absorb them all. Work shirts are profitable. Easy channels of distribution have been built up. They keep lots of prisoners busy. The warden does not have to look to the legislature for the money to run his prison, therefore he has a freer hand, less interference. No wonder he doesn't want to change!

But work shirt making is not man's work. The prisoner who has learned to make work shirts cannot find a job when he leaves prison. He has acquired skill in a job which is done by women in free industry. Prisoners should be taught work which they can do when they leave prison. The work shirt is only illustrative; but it is a fair illustration.

Legislation by the various states is needed this coming winter if they are to be ready in 1934. Every state must give the problem careful study if it is not to be the one to spoil this effort to solve a very difficult problem.

Labor ▶

Deep Strategy In Dress Trade

MANUFACTURERS of children's and junior dresses were called by the United States Department of Labor to meet in New York for discussion of union demands that they co-operate in the suppression of sweatshop conditions. Four hundred companies were invited to send representatives. Only 20 persons showed up.

The lack of interest is surprising after the agreements reached between manufacturers and employees in the cloak and suit and in the millinery embroidery industries. Both of these have set up co-operating arrangements between employers and employees. The manufacturers, if they are to work with a union, prefer to deal with one strong enough to control the workers. There is real hope on both sides that conditions throughout the trades will be less chaotic because of the agreements.

Herbert Photo

ALL MACDONALDS TRAVEL

Malcolm MacDonald, Labor M. P., son of British Prime Minister, sails for Vancouver, B. C., while his father and sister are here. Young MacDonald will go to Japan for meeting of Institute of Pacific Relations

These various moves by the International Ladies Garment Workers' Union are advance skirmishes, intended to consolidate the union position for its drive in the dress trade. The dress employers are well organized; stronger than the union, which desires to extend its membership. Both sides feel a strike is inevitable. Even if conferences could be successful between employers and union it would probably be necessary to have some cessation of work in order to get thousands of non-union employees to take out cards.

The employers will hardly come to any working agreement with the union unless, or until, the latter can show a membership roll big enough to prove it can carry out its promises. It is quite possible, therefore, that the employers will let the situation come to a strike in order to assist the union in getting its membership built up.

Retailing ▶

Charge Customers Returns Heavy

APPROXIMATELY 1/6 of all goods purchased on regular charge account sales of department stores are returned, according to a report in the current issue of Domestic Commerce. However, the expense involved in double shipments, and wrappings, and breakage is paid by the public in a higher selling price on the retailed article.

Retailing ▶

Fine Feathers— But Not Expensive

THE business girls' clothing budget contest, conducted by the Exposition of Women's Arts and Industries, reveals that the small-salaried woman in New York spends on her clothes approximately 25% of what she earns. She does not "put every cent she makes on her back." Her yearly clothing demands, according to 164 typical budgets, include 8 or 9 dresses at $5 to $15 each, two or three coats, four or five hats costing from $1 to $5 each, five pairs of shoes, 18 pairs of stockings.

It is worthy of note that few of the girls found time or inclination for dressmaking. The modern girl finds value for her dollar, not in buying goods by the yard and spending hours creating dresses and hats, but by watching the shops and determining when and where her money will go the farthest. These findings have considerable significance for dry goods and clothing stores. They explain the enormous decrease in piece goods retailing.

Distribution ▶

To Study Why Retailers Fail

THE Commerce Department proposes to select a representative city of 500,000 and study the reasons for the business failures of all classes of retail stores over a period of years. Business failure is defined as what happens when firms retire from the field with losses to creditors. Comparative mortality rates

among the various types of stores will be obtained. It will also be ascertained definitely just how much better off are the merchants who belong to credit bureaus.

Construction ▶

Plans Chain of Automatic Garages

RUTH SAFETY GARAGES, INC., has been formed to build and operate a chain of skyscraper garages in densely populated districts of large cities. Motorists will drive their cars into high speed elevators and lock them if they wish. Elevators will take the car to the desired floor where they are run onto parking racks by means of a gravity tipping device. About 30 seconds is required to get a car from such a garage. Chicago has had such a garage for some time.

The first unit in the new chain is the 28-story building now under construction in Plymouth Court, Chicago. The second is scheduled for Omaha. Others are planned for the Loop District of Chicago, in midtown and downtown Manhattan, in the Broad Street District of Philadelphia and other congested areas where parking space is scarce.

Production ▶

Fordson Building Biggest Boiler

FORD MOTOR COMPANY is to have two new steam generating units at its Fordson plant. Each unit will have a maximum capacity of 700,000 pounds of steam per hour at 1350 pounds pressure and superheated to 750° Fahrenheit. This is the highest steaming capacity of any boiler ever built for such a high pressure. The boilers will be fired by pulverized coal. The furnaces are to be water cooled with air preheaters to heat air used for combustion. The installation is to be made by Combustion Engineering Company early in 1930.

Automotive ▶

New Air Motor, New Speed Car

IN Germany a four cylinder, air-cooled aviation engine of unusual design has been developed. In England plans are announced for a 4,000 horsepower automobile capable of making 300 miles per hour which will be brought to Daytona Beach for a trial at the speed record.

The new racer will have two engines of 12 cylinders each. The entire car will be little larger than an ordinary passenger car. Since life of tires is a limiting factor in attainment of high speeds experiments are being made with silk tires as offering better service than others.

The feature of the German aviation engine, developed by Argus Motoren Gesellschaft, is that the cylinders point downwards. This is said to give the pilot better vision, to reduce head resistance of the plane, and to permit the use of lower landing gear due to the higher position of the propeller shaft.

Production ▶

New Gasoline For H-C Motors

LABORATORIES in the oil industry are struggling continuously to meet the popular demand for better and better performance in motors of higher and higher compression.

Pure Oil Company will place "vapor-phase" gasoline on sale next week at all company-owned stations. Five of the six Pure Oil refineries have been equipped to make it.

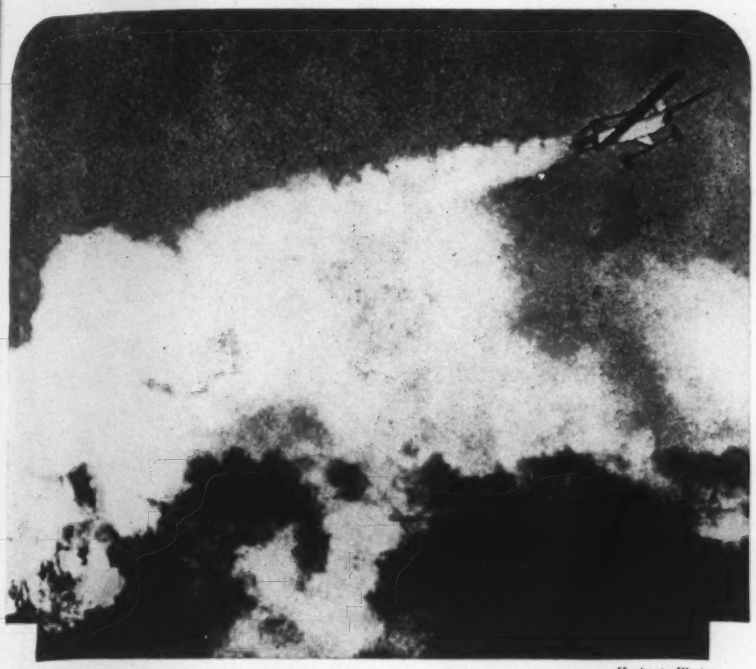
Vapor-phase gasoline differs from liquid-phase in that, as the names indicate, "cracking" in the new process is done after the crude oil has been volatilized by heat; in the old process, while it is still in liquid form. Pure Oil uses temperatures of 1200° as against 725° —750° in the familiar Burton process. Vapor-phase cracking does away with the pressure necessary in liquid-phase cracking. This reduces explosion hazards in refineries, so Pure Oil engineers assert.

Vapor-phase cracking is not a new idea. In fact it was done before liquid-phase processes came into use. But the product was yellowish and unstable and yields were low. No one suspected then

Herbert Photo.

FOR EFFICIENCY'S SAKE

Edsel Ford starts largest fleet of airplanes in history on National Air Tour for the Edsel B. Ford Efficiency Trophy. In sixteen days aviators will visit thirty-two American and Canadian cities



Herbert Photo

SHOT SKYWARD

Opel rocket plane photographed as first of three rockets exploded. German experts predict early crossing of Atlantic by new type aircraft

that it contained hydro-carbons with anti-knock qualities that would some day make possible charging 3c a gallon premium for it.

All principal oil companies are experimenting with vapor-phase cracking. It is likely, however, that the licenses under whatever vapor-phase process is finally determined to be best will be issued by the "Patent Club" to which most large oil companies belong.

Chemists are now concentrating attention on the problem of making vapor-phase gasoline that can be stored for indefinite periods without losing some of its effectiveness. Certain of the largest refiners have built up operations around lake transportation. They make gas in winter and store it for several months to transport and sell next season when navigation opens. A gasoline that will keep five months or more is essential to them.

Production ▶

Russia Swells World Oil Flood

RUSSIA is rapidly becoming an important factor in world oil production. During the fiscal year just ended production surpassed 100,000,000 barrels, an all-time record 17% ahead of last year and 49% over the last pre-war year.

Twenty-seven per cent more oil was poured into the already flooded world market than in 1927-28. Italy bought the largest quantity. England, France, and Germany supplemented their regular needs with increasing amounts. The Soviet Naphtha Syndicate has concluded contracts with Standard Oil of New York and Vacuum Oil for shipments with annual value of $10,000,000 direct to foreign markets of the American companies.

Purchases of American equipment for the Soviet oil industry amounted to $9,600,000.

Production ▶

General Motors on West Coast

GENERAL MOTORS is reported to be negotiating for a Los Angeles site for an assembly plant, to cost probably $10,000,000, and include affiliated industries. General Motors subsidiary companies have plants in about 30 cities of the United States but the Chevrolet assembly plant at Oakland, Cal., is the only one on the Pacific Coast. Increasing trade with Hawaii, Philippines and other markets served from the West Coast suggest reasons for development.

Production ▶

New Markets For Lead

TWO new markets for lead, expected to develop into important items of consumption, are viewed with increasing interest by producers in that field.

In building construction, lead mattresses are being used to act as shock absorbers between foundations and the steel framework of skyscrapers. In one New York building alone about 55 tons of lead were recently used in this way. In the field of pigments, a new lead preparation, "subox," is being introduced. Sprayed or brushed on a surface, this preparation undergoes a slow transformation, resulting in a protective film of metallic lead. These uses are in addition to amaloy, employed for soldering work in the automobile industry and in the manufacture and installation of electrical equipment.

Production ▶

Car Ices Itself By Axle Drive

A REFRIGERATOR car in which mechanical cooling is obtained by power drawn from a car axle while the car is in motion has been developed by North American Car Corporation. The new car will be operated under the trade name "Frigicar." The aim is to eliminate stops for re-icing, deterioration to right of way and structures by dripping brine, and loss of time in operation.

Production ▶

More Tin Used— It Costs Less

THE metal industry is pleased to note that the consumption of tin is increasing and that production costs have decreased to approximately pre-war levels.

In 1928, the United States used 73,270 tons of virgin tin, about 7.5% more than in 1927. This equaled 41% of world production (178,000 long tons). In addition to virgin tin, 12,106 long tons of secondary metallic tin were used by manufacturers of tin products in 1928.

Only minor new uses for tin have recently been developed. Some older uses

have been discontinued, although the quantities involved are insignificant. Variation in consumption from year to year parallels fluctuations in demand for tin products already well-established. Example: manufacture of bearing metals and solders for motor cars and trucks required 19,000 tons in 1928—16,000 tons in 1927. The canning industry continues to require the greater portion of the tin plate and also much solder. Growth in the electrical and other more recently developed industries, such as aviation, refrigerators, and radio, although affecting total consumption, has made little change in the proportions required for the basic methods of using tin.

Production ▶

What Becomes of the Wood in a Log?

ANNUAL lumber wastes in North Carolina, if utilized, could supply frame dwellings for all the inhabitants of Dubuque; or converted, could produce 190,000 tons of wood pulp; or saved, would represent 113,000 acres of average stand timber. Transported as rough lumber, it would fill 33,000 freight cars.

Eager to stir a lethargic industry, the National Committee on Wood Utilization is publishing these gloomy facts far and wide among lumbering interests—fifth most important of America's industries.

In the United States, two-thirds of the entire forest drain is lost during manufacture and use. Many wood working industries waste from 30% to 40% of their raw material.

In most European countries, a mill that does not utilize two-thirds of the tree cannot operate at a profit. From comparative figures as to what becomes of the wood in a log in the United States and in Sweden, the report shows that the resulting seasoned rough lumber is in this country 45.6% of the material of the log, in Sweden 69%; that 13.5% of the American log is wasted in sawdust; in Sweden only 8% goes into sawdust.

Two solutions to the problem are suggested: reduction of production waste at the source through improved machinery; increasing the uses of the waste. To bring about the second solution, the Committee would form an organization to assume the responsibility for the purchase, transportation and resale of non-utilized material. Last year, without this organization, 24,000 tons of wood flour were made from sawdust and sold for $750,000 to manufacturers of linoleum, explosives, and artificial fibres. If organized, even larger savings would be possible through cooperative effort.

Keystone Photo

WHERE BUSINESS HAS TRADITIONS

John Dwight started these fires in 1761 with tinder and flint in his pottery at Fulham, England. They have not been extinguished for 258 years

Production ▶

African Copper and World Outlook

WILL increasing production of copper in Northern Rhodesia (central Africa) break the price of the metal to such levels that established American companies will suffer?

The copper industry is pondering this question somewhat apprehensively. Union Miniere, in the Belgian Congo but in the same general field, has rich properties and has been producing for nineteen years. Two others—Bwana M'Kubwa and Roan Antelope—are to be intensively worked in the next few years. Total production of these mines together with that of two more properties about to enter the field (M'Kana and Mufulira) is expected to total 500,000 tons yearly by 1939. Doubtless other deposits now unknown will be opened up in that time.

World consumption of copper (1928) was slightly in excess of 2,000,000 tons—an increase of 14% over 1927, but this was abnormal. Increase in 1927 was 2%. For the last nine years the average increase has been 9%, and if this continues, the world will require in 1939 about 5,000,000 tons. Of this, then, Africa is expected to contribute 500,000 tons.

Railroads ▶

1929—The Year of Faster Trains

RAILROADS during the past year have done credit to themselves by a general speeding up of schedules, both freight and passenger, while increasing also the percentage on one-time

trains. Schedules of Boston & Maine's summer trains averaged 55 minutes faster this year than last, and only one train out of each 50 arrived late.

Many east-west schedules have been cut. Reductions in running time between important northern and southern points are to come next. The Southern Railway, on the same day that all the new 20-hour New York-Chicago trains started running, lopped two hours and fifty-five minutes off its New York-New Orleans running time. With competition keen, and a good winter tourist season expected, faster Florida trains are authoritatively forecast.

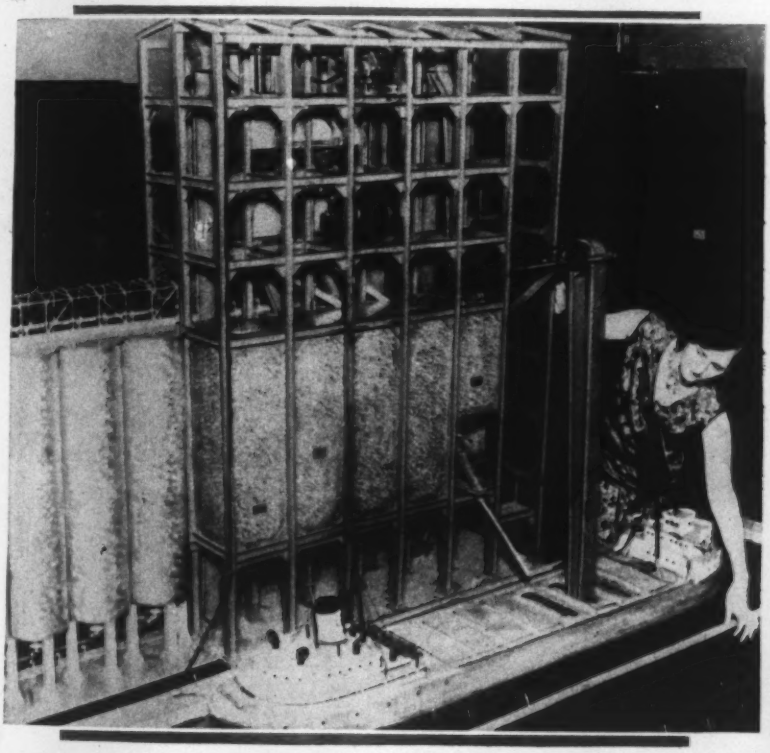
Here are some of the cuts made so far this year: The old Pennsylvania Limited, which for 47 years ran on the same schedule, leaving Chicago at 5:30, arriving New York 5:30, has succumbed to progress. It now leaves at 6:00 and arrives at 3:50; Chicago-Northwest coast schedules have been reduced from 68 to 63 hours one way, 61¼ the other; Chicago-California, 63 to 68 hours; Chicago-Denver, cut 1:35, to 25:20; New York-Cleveland, 1:10 faster; New York-St. Louis and Cincinnati, 1 hour; "The Spirit of St. Louis," on the Pennsylvania, now does it in 23 hours and 50 minutes; Boston-Washington trip can be made now in 9½ hours on "The Senator," new crack train, and so on.

The blue ribbon for schedule cutting goes to the National Railways of Mexico, and the Missouri Pacific. In collaboration, they have put customs inspectors on trains, and speeded them up so that they have cut off 12 hours travel time from Mexico City to St. Louis.

Freight is faster, too. California fruit and vegetables are being delivered to New York on the tenth morning, one day sooner. Chicago and St. Louis freight gets third morning delivery at the Atlantic seaboard. Now the Pennsy says that instead of slowing down its main freight trains one hour for the winter as heretofore, the fast summer schedules will be maintained through the cold months. Freight trains the country over, stops included, averaged 12.9 miles an hour in 1928 against 11.5 in 1924 and 10.3 in 1920.

Reliability in freight service is in most cases more important than excessive speed. The Chicago Association of Commerce, which keeps tab on all package freight cars out of Chicago, reports that in August of this year 93.98% of 67,577 cars arrived at destinations on or ahead of time, as against 91.02% of 46,991 cars in August, 1928.

Faster fast freight and ever shortening passenger schedules—the railways are keeping pace with this age of speed.



International Photo

EVERYTHING BUT THE WHEAT

Rose Buchanan demonstrates miniature grain elevator built by employees of Chicago Board of Trade. Unit is complete with elevator, lake freighter, switching tracks, unloading platform, and freight cars. Electricity operates it

Railroads ▶

New Trains Help Mails But Little

MAIL has not as yet been speeded up much by the fact that there are now fifteen 20-hour trains between New York and Chicago, instead of four.

The Century for a long time has been a fleet of trains—2,153 in the past year, to be exact. New York Central is now taking the sensible step of running them in instalments throughout the day instead of all at once.

Only two of the five 20-hour New York Central trains, Chicago to New York, and one of the four, New York to Chicago, carry mail cars. Others transport pouch mail. The new Fast Mails, (Central and Penn.) leaving Chicago at 9:50 a.m., somewhat speed mail service between points west and New York, since they carry east the mail brought in by the many early trains that arrive in Chicago. Mail is sorted right on the trains for carrier delivery in New York. It arrives at 6:50 the next morning.

The Twentieth Century, 12:40, carries the other mail car going east. The crew comes down to work early and starts sorting mail for carrier delivery in New York. Such pouches as are filled by 12:00 now go on ahead, on the Advance 20th Century. The Pennsylvania's Broadway Limited matches this.

But as yet there are no mail cars on the New York Central's Commodore Vanderbilt, and the Pennsylvania's Golden Arrow, both of which leave Chicago at 2:00 and reach New York at 11:00.

If mail cars were used on the two trains leaving Chicago at two o'clock and on one or more of the three trains leaving New York at either four or five o'clock, business would be better served. It would then be possible to post mail in the early afternoon and have it on the recipient's desk 900 miles away when

he returns from lunch the next day. At present mail posted in the early afternoon usually does not get through till the morning of the second day.

A 20 hour and 50 minute train, the Mohawk, leaving Chicago at 4:00, takes pouch mail received at the post office to 2:45, and arrives in New York at 1:50 the next afternoon, in time for late delivery. A mail car on this one, too, would help speed up business.

Railroads ▶

Big Rate Cases Before I. C. C.

CONSOLIDATION is not the only problem to furrow the brows of Interstate Commerce Commissioners this fall. They must deal also with rail-and-water controversies, the so-called "iron rate" case, the recommendations of I. C. C. examiners on the proposed change in Eastern class rates, and the upward revision of the class rates between Chicago and the Rocky Mountains. The decision in the Eastern case, if favorable to the railroads, will increase carrier revenues by $50,000,000; in the Western, by $15,000,000.

Alleging discrimination against the Port of New York through unequal rates on iron and steel, the Eastern roads have asked the Commission to reopen the iron rate case. They complain that the basis worked out by the I. C. C. would mean a revenue loss of $2,500,000. As a further complication, the State of New Jersey has petitioned for a freight rate differential over New York City. This petition is hotly opposed by L. F. Loree, on behalf of the New York Chamber of Commerce. On the other hand, Eastern shippers deny the I. C. C. basis would deplete the revenues of the railroads, and say American systems are well on the way to earning $108,000,000 more than in 1928. In Chicago, Western shippers held a meeting, and are likely to join the Eastern group in opposing higher rates.

In the South, the Ocean Steamship Company, the Atlantic Coast Line and the Seaboard have asked for lower rates between Jacksonville and northeastern ports. The I. C. C. denies their right to alter class rail-and-water rates, holding that rail and water competition must be maintained, and that the Clyde Line and Merchants & Miners Transportation Company, chief rivals of the appellants, have equal right to the business.

It is difficult to say which side is right in the eastern and western rate controversies. It is true that the revenues of the roads show a great increase over last year. On the other hand, if the Commission grants both class rate adjustments in favor of the roads, the sum gained would mean a net increase of less than 2% on freight revenues of all railroads. Even if the roads do make the best showing in history this year, they will still be short of the fair return of 5¾% to which the law entitles them.

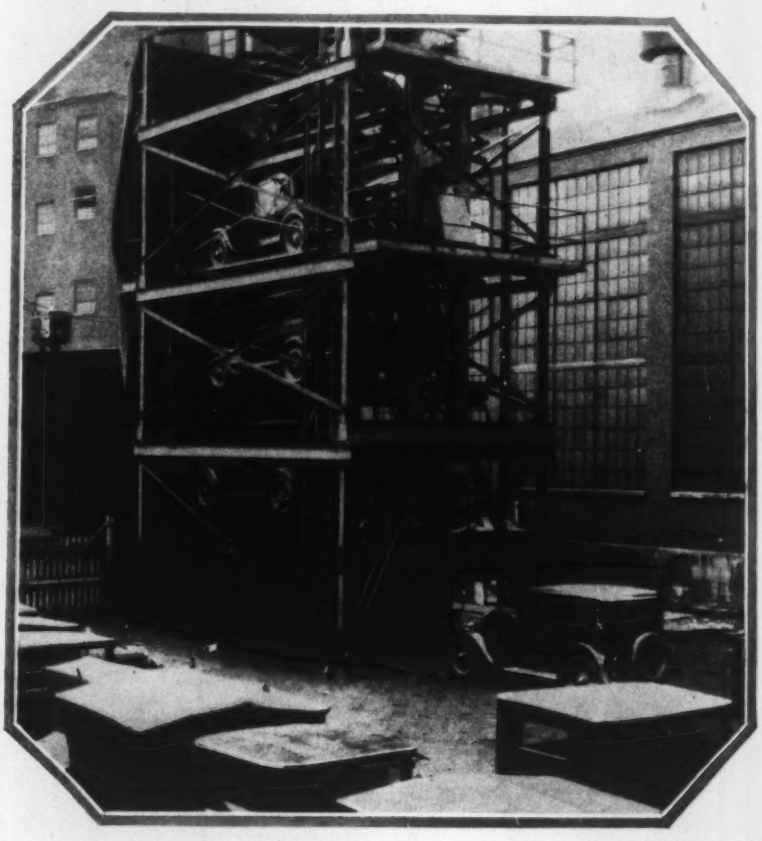
Utilities ▶

Standard Oil in California Fight

OIL and hydro-utility companies are waging a furious gas battle on the Pacific Coast. The principal combatants are the Pacific Gas & Electric Company, one of the far West's largest utilities, and Standard Oil Company of California, until last week masked as Western Natural Gas Company. Standard recently acquired Pacific Public Service Company, an important natural gas distributor. The row is to decide which shall serve the rich industrial sections in San Francisco Bay regions with gas from Kettleman Hills and Buttonwillow oil fields, 300 miles away.

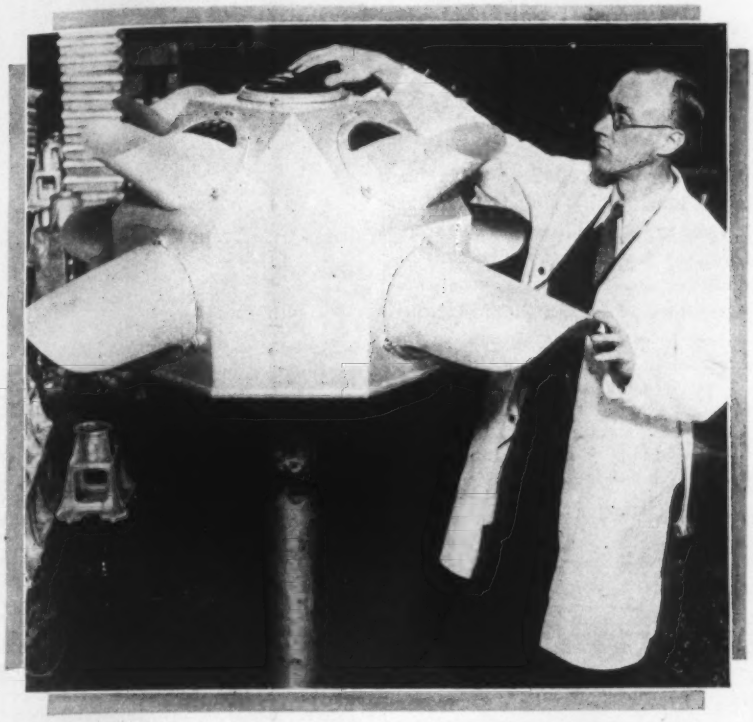
Whatever the outcome, Standard has troops in reserve. It already has oil pipe lines on its own right of way, and threatens to add a gas line. Moreover, it plans wide distribution of a new type of canned heat called "Flamo." Casing-head gas, formerly lost into the air, is to be captured, compressed and delivered in refillable drums to housewives for use in gas stoves. This worries Standard's competitors, because the utilities commission has no jurisdiction over this form of distribution.

Standard's purchasing Pacific Public Service, becomes the first oil company to enter the utility field. It is an interesting development, and presents regulatory problems which will go round the country.



PARKING IN THE AIR

Westinghouse has developed this automatic "car parker" which takes a car or delivers it at the touch of a button. Cars are carried on an endless belt. Parking machines can be put in vacant lots, behind theatres, store buildings, to take many cars off the streets



International Photo.

STOP AND GO SIGN FOR FLIERS

New type beacon to be installed at Grand Central Air Terminal, Los Angeles. Red indicates dangerous landing; green means safety. Beams will be visible 1,000 feet vertically and 2,000 feet horizontally

Distribution ▶

Selfridge Talks of British Stores

H. GORDON SELFRIDGE, owner of London's largest department store, studied with keen interest THE BUSINESS WEEK'S article analyzing American department store problems, published in last week's issue.

Traffic congestion is not having any effect on the sales of his downtown store, he said. In the first place, London sprawls more than New York. So few of Selfridge's shoppers come by automobile that there is ample accommodation in side streets for all those who want to park their cars.

The experiment various American metropolitan department stores are making in establishing suburban branches interested Mr. Selfridge. His store is committed heavily to this policy. Selfridge has about thirty retail outlets covering the important cities and the provincial districts of England. Some of them were established by the Selfridge store. In many other cases small stores were purchased and operated under their old names, with the additional descriptive title—"Selfridge Provincial Store."

Branches in the suburbs and outer city districts have not been located with the thought of providing easier automobile access, but rather to be within easy reach afoot or by tram.

Selfridge's maintains a New York buying office just as our stores maintain London and Paris offices. Mr. Selfridge is inspecting the New York establishment.

Distribution ▶

Who Won the Cigarette War?

THE American Tobacco Co., R. J. Reynolds Tobacco Co., and Liggett & Myers Tobacco Co. announced Oct. 6 an increase in the wholesale prices of their popular cigarette brands from $6.00 to $6.40 a thousand. The brands were Lucky Strikes, Camels, Piedmonts, and Chesterfields. Lorillard's then raised the price of Old Golds from $6.10 to $6.40 —the differential of 10¢ which they have clung to during the period of cut prices and which is suspected to have had some special significance in the so-called price war thus being abandoned.

Retail prices responded. Three days later the United Cigar Stores began selling these brands at 15¢ straight instead of two for a quarter. Schulte action is predicted at a board meeting October 15.

High-priced cigarettes are following. Philip Morris & Co., Ltd., increased Players from $8.00 to $8.40 and Oxford Blues from $13.25 to $13.75.

The increases have brought prices back to where they were before the cuts. Recently the market price of tobacco leaf of the grade used in cigarettes has increased from 7% to 10% over last year's prices. Farmers will get more for their crops. There is a wider spread for the manufacturers. The retailers get a better profit.

The tobacco industry is to be congratulated on its leaders who terminated a marketing condition which was costing all in the industry more than it was saving the public in retail price. In other words, the income of the country is increased more than its expenses by stopping the price war.

Meanwhile the effect either of lower prices or the more intense advertising of the past year may be seen in the fact that the government reports an increase in cigarette stamp sales of 16%. Present year figures indicate per capita consumption of 1,000, against 856 in 1928, and 820 in 1927.

Distribution ▶

Merger Adds Bottles to Cans

CONTINENTAL CAN COMPANY, INC., and the Owens-Illinois Glass Company plan to merge. The new company, Continental Containers, Inc., will have an authorized capitalization of 5,000,000 no-par shares. Two-thirds ratification by stockholders is needed to make the plan effective.

America has boasted of production efficiency derived from specialization. Present trends are towards diversification—inclusion of complete marketing lines—pooling of distribution facilities. Continental Containers, Inc., aims to produce and market all types of containers for wet goods.

Swift Survey of Business Abroad

In cooperation with Bureau of Foreign and Domestic Commerce

EUROPE—Business in several countries looks to government action for winter stability. Industry active; trading brisk.

Great Britain—Pinch on call funds and consequent high rates prevail in Lombard Street, despite slowing up of outward gold movement. Beneficial effect of raised bank rate is reflected in sterling exchange, higher than at any time since July 10, 1928. Significant is a manifesto from 17 manufacturers' associations demanding a new credit and financial policy along lines followed by the Federal Reserve Board of America. The plea is that expense of maintaining free gold market is largely carried by industry. Home industry and trade fairly satisfactory. District coal associations approve national cooperative marketing scheme. (cable)

France—Gold holdings increase. Trading interests watch government reaction to suggested reconstruction of Bourse to eliminate restrictions made during the War. Except in export trade, the industrial situation remains strong. Commodity prices are down; raw materials unchanged.

Italy—Volume of business is larger than a year ago and preceding months this year, despite credit stringency. Industrial production is increasing; large crops in prospect. Extensive public works program to relieve winter unemployment not yet announced. Press campaign against American automobiles depresses sales. (radio)

Spain—Peseta again firm following wild fluctuation early in week. Favorable crop prospects bright spot in otherwise depressed economic situation. New Council of Energy to plan production of abundant cheap electric power; mineral institute to direct systematic development of resources; government commission plans establishment of automotive industry with annual output of 20,000. (radio)

Austria—Change in government puts end to incipient financial panic. Withdrawal of bank deposits and purchase of foreign currencies almost cease.

Sweden—Scandinavian banking and money units stronger than at any time in many weeks. Industry operates at high level; no prospect of recession. Crop conditions good. Swedish match trust offers to lend $150,000,000 to Germany against virtual monopoly of German match trade. (radio)

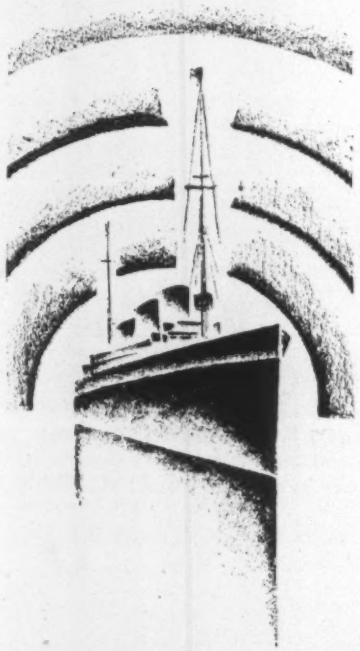
FAR EAST

Japanese business plunged into uncertainty again; North China traders ignore civil skirmishes. Trade spotty and generally inactive.

Japan—Yen weakens on announcement of death of Tamaka, former Premier and head of the Seiyukai. Renewed opposition to removal of gold embargo possible. Approaching general elections in January another disturbing factor. Foreign trade shows signs of improvement. Considerable unemployment in Tokio. (radio)

China—North China export begins usual heavy fall movement to Tientsen. Good trading season, favored by low silver exchange, is expected. Bankers in North China not coming forward with allotted share of disbandment loan, awaiting action of Shanghai banks, reported to be holding aloof. (radio)

British Malaya—Increase in Bank of England discount rate reflected in lower prices for rubber and tin shares on the Singapore market. (cable)



AFRICA

Egypt—Reserve fund of 4,000,000 Egyptian pounds created by government for farm relief.

Union of South Africa—If Union and Southern Rhodesia fail to reach agreement on continuing customs union expiring December 31, Rhodesia is expected to establish a separate tariff increasing preference on British goods to the prejudice of Union manufacturers. (radio)

LATIN AMERICA

Mexico—Early frost hits corn. Recent storms depress business. Highway program delayed. Petroleum production continues to decrease. (cable)

Porto Rico—Business at lower level than in several years past; money scarce. Arrival of Governor Roosevelt greatest factor for optimism.

Argentina—Rainfall favors growing crops. Export movements still hampered by labor troubles at the ports. Export duty on flaxseed raised to $3.88 (from 31 cents in July). Import of American automobiles at new high; proposed vast road-building program will increase present large market. (cable)

Chile—Some improvement in general business situation seen in heavy sales in practically all lines. Industrial production at high level; copper and nitrate output steady, with good future orders. Weather favors crops; new irrigation projects to open wide area of rich farming land. Imports of automobiles and agricultural implements especially good; construction steel in excess of requirements. (cable)

Venezuela—Trade picking up with improvement in political situation but caution still dominates business circles. Personnel of petroleum industry curtailed but intensive production continues. (cable)

Colombia—Prostration of business accentuated by credit stringency. No improvement in sight; unemployment widespread. (cable)

Peru—Trade restricted but mineral production continues high. (cable)

What the Figures Show

THE latest week's statistical news is decidedly encouraging. Industrial activity and general trade are well sustained and the outlook for future business has improved.

Steel mill operations this week have declined only slightly from the preceding week and are but little below last year's level. There are signs that the falling off in recent weeks has been about checked. Probably the main effect of the slump in automobile steel demand has been registered in operations, and a good rate will be sustained by railroad orders for rails and equipment, and by the more widely diversified demand which rules today in the steel market. Structural steel orders fell off sharply for the latest week, but inquiries are reported at record figures.

A strong and surprising promise of a good level of steel operations came in a sharp rise of 244,370 tons in the Steel Corporation's unfilled orders as of the end of September. This is the first rise after four successive months of decline and brings future business to a level about 200,000 tons above that of September 30, 1928. Probably heavier or earlier rail orders account for the increase, and may make future business at the end of October somewhat lower.

FIGURES OF THE WEEK

(Compiled with the co-operation of the Survey of Current Business)

	Latest Week	Preceding Week	Year Ago
PRODUCTION			
Steel Mill Operation (% capacity)	84	85	87
Building Contracts (F. W. Dodge, daily average in thousands)	$17,991	$15,927	$28,996
Bituminous Coal (daily average, 1,000 tons)	1,909	1,811	1,843
Petroleum (daily average, 1,000 bbls.)	2,887	2,900	2,524
TRADE			
Car Loadings (daily average all classes, 1,000 cars)	200	194	200
Check Payments (outside N.Y. City, millions)	$ 7,579	$ 6,736	$ 6,849
Wheat Receipts (1,000 bushels)	11,123	10,811	19,793
Cotton Receipts (1,000 bales)	803	623	790
Cattle and Calves Receipts (1,000 head)	384	347	385
Hog Receipts (1,000 head)	505	431	469
Wool Receipts (1,000 lbs.)	4,484	1,691	919
PRICES (Average for the Week)			
Wheat (No. 2, hard winter, Kansas City, bu.)	$ 1.23	$ 1.25	$ 1.10
Cotton (middling, New York, lb.)	$ .189	$ .186	$ .193
Iron and Steel (composite, ton)	$36.32	$36.36	$35.42
Copper (electrolytic, lb.)	$ .178	$ .178	$ .150
All Commodities (Fisher's index, 1926-100)	94.7	95.8	99.3
FINANCE			
Total Loans and Discounts, Federal Reserve member banks (millions)	$ 6,713	$ 6,804	$ 4,590
Commercial Loans, Federal Reserve member banks (millions)	$ 9,602	$ 9,524	$ 9,147
Brokers' Loans, New York Federal Reserve member banks (millions)	$ 6,713	$ 6,804	$ 4,590
Federal Reserve System Ratio	74.4	72.7	67.6
Stocks Sold (N.Y. Stock Exchange, 1,000 shares)	23,927	24,557	21,994
Stock Prices (N.Y. Times, average 50 stocks)	$284.37	$296.13	$203.39
Bonds Sold (N. Y. Stock Exchange, par value, thousands)	$55,715	$51,243	$55,260
Bond Prices (Dow, Jones, average 40 bonds)	$ 92.04	$ 92.18	$ 96.56
Interest Rates—Call Loans (daily average)	7½%	8⅞%	7⅛%
Interest Rates—Time Loans (daily average)	9%	9⅛%	7¼%
Business Failures (Dun, number)	396	428	429

DAILY average general building contracts for the first few days in October were at a somewhat higher level than during the preceding week but still below last year. Heavy construction contracts, according to *Engineering News-Record* figures, showed a further decline for the week ending October 10 and are considerably below a year ago. Building permits for September declined 30% compared with September, 1928. It now seems as though building and automobiles will be definitely out of the business picture for the rest of this year.

The rate of bituminous coal production for the latest week showed further increase and stands about with last year's. Though this is partly seasonal, it suggests a sustained level of general industrial and railroad activity. Petroleum production showed a further decline for the week but is still above last year's level. The decline was altogether in the Eastern fields. California production increased.

Agricultural marketings were at a somewhat higher level generally for the latest week. Wheat receipts increased but are still running below last year. Cotton receipts are strong and above the level

of a year ago. Cattle and calves are coming to market at about last year's rate. Hog marketings are somewhat higher and wool receipts show a sharp increase.

THE weakening in prices continues. On the average for the latest week wheat prices fell off slightly. Cotton gained but is still below last year's level. The iron and steel average continued to drop and is lowest since February, but still above last year. Copper remains steady and above a year ago. The general price level showed a further and somewhat more marked decline for the week and is now almost 5% below last year at this time.

General trade indications are good. Daily average carloadings of all classes showed an increase for the latest week and are last year's level. Check payments are above the preceding week and a year ago. Postal receipts for September show an increase over 1928. Chain store sales for thirty-six systems so far reporting for September were nearly 20% above last year, although Woolworth shows a slight decline for the month. Department store sales for September were almost 2% above last September, though there is considerable regional irregularity. The Minneapolis district reports a decrease of 5.2%, Kansas City an increase of 5.5%, while increases over 4% were reported also by New York, Richmond and Chicago districts.

Money and The Market

STEADINESS and some strength were present in the stock market this week after several weeks of decline. The sharp rebound of Saturday and Monday was natural after the break. Further upward strength did not appear until the latter part of the week. Market operators continue very cautious. There is much feeling that although prices are at considerably lower levels than six weeks ago, readjustment is not yet completed. The current week, therefore, was one of "testing," and this may continue to be the case for some time.

Two outstanding developments were present, both unexpected. After the unusually high renewal rates the first of the week, call money dropped to 6% and then to 5% for the lowest rate since August 1928. The other was an increase in U. S. Steel unfilled orders when a decline had been expected. Both tended to give strength to the market although to a lesser degree than would have been the case a few weeks back. Rumors of business and industrial recession also quieted down, which in its turn helped the market.

Cheap money is distinctly abnormal and quite unlikely to last. A temporary surplus of funds by individuals and investment trusts after liquidation in the recent decline, the strong position of New York banks somewhat at the expense of banks in other Federal Reserve districts, and a letup in the demand for short term money have been contributing factors. Time money eased from 9¼% to nearer 8% but continues far higher than the low call rates. This is significant.

The temporarily easier money here strengthened the exchanges in the week. Sterling was higher than since July 1928 in the week, and so were guilders. The Bank of England gained more than £1,600,000 in gold as the effects of its higher discount rate were felt. The German and French central banks showed little or no change in their gold holdings. There were no developments of importance in the chief stock exchanges. Financial circles were unsettled by the flurry in Austria, where Chancellor Schober had to take a hand and cause the Oesterreichische and Boden banks, the nation's largest, to merge in order to protect stability.

Federal Reserve reporting member banks are now extending credit in larger quantities than ever before in history. Loans and investments at $22,829,000,000, total loans at $17,428,000,000, security loans at $7,826,000,000, and unsecured loans at $9,602,000,000, are all at highest totals. An expansion of member bank credit is perfectly normal at this season of the year due to fall business. Such unusually high totals are, however, a matter for consideration. Member bank investments continue to fall off.

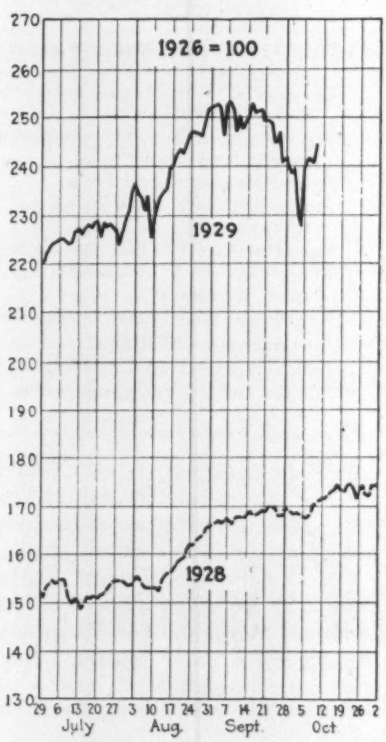
Brokers' loans declined the substantial sum of $91,000,000. This gave the Street some encouragement, but was not nearly so much of a drop as Wall Street had hoped for in view of recent decline and readjustments. The decrease was accounted for principally by New York banks and secondarily by out of town banks. Non-bank money continues to go into the market and the total of these loans went to a new high record of $3,941,000,000. Indebtedness of New York banks to the Federal Reserve dropped to $30,000,000, an unusually low point and reflecting the strong position of these banks.

Gold holdings of the Federal Reserve banks went to $3,161,000,000, the first time the total has been above $3,000,000,000 in more than two years. Gold imports of the week totaled $3,055,000, but this was partly counteracted by increase of $1,000,000 in earmark, and negligible export to Mexico. Discounts at the Federal Reserve banks dropped to $857,306,000, the lowest point since January. The Reserve system slowed up in its buying of bills, taking only $11,000,000 more, as the peak of credit demand is passing.

Holdings of government securities moved slightly downward. Result of transactions was an upward move of 1.7% in the Reserve ratio. Ratio of the New York bank continued its striking upward course to 85.3% as more gold came in and discounts dropped. The bill holdings of the New York bank dropped off as other districts continued their buying.

THE MARKET DAY BY DAY

(Standard Statistics Company's Daily Stock Price Index)



What Business Recession?

RECENT monthly indicators of production and trade show what is called "irregularity," which means simply that things are not going all one way. There is no conclusive evidence of any serious recession of business, or even of any general slackening. These irregularities must be looked at against the background of the first eight months of this year. The chart on this page shows what this background is like.

It has been a period of exceptionally high activity, above last year in every important factor save general building construction. Even here the heavier types of construction have run consistently ahead of 1928. The *Engineering News-Record* reports show a 20% increase for the first nine months over the same period in 1928 in contracts for heavy construction and engineering work. This branch of the construction industry is steadily becoming more important in the total. Residential construction has declined from about 45.7% of total contracts awarded in the 37 states covered by F. W. Dodge figures in 1925 to 34.5% this year, while public works, for example, have risen from 15% to 22.2% of the total.

As the chart shows, industrial production, the primary distribution of goods by railroads, retail and wholesale trade, and consumer buying power in terms of factory payrolls have been running far ahead of last year up to September. Department of Agriculture figures show, too, that farmer purchasing power in August was somewhat higher than in 1928.

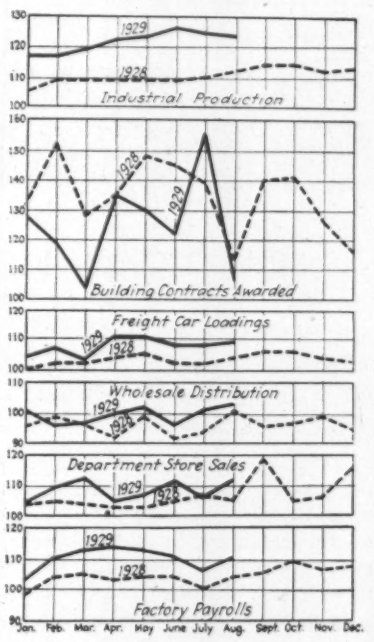
Federal Reserve Bank reports from the various districts for August and early September show a fairly sustained level of business except in the case of the New England district. Of 46 indexes of business activity and production in August computed by the New York Federal Reserve Bank, 34 were above and only 12 were in any measure below the normal or expected level for the season.

September figures so far available are encouraging. Postal receipts in 50 industrial cities—a general but sometimes significant indicator of business trends—were nearly 7% above September last year. Pig iron production—a not entirely discarded barometer of business conditions—was at a rate 4.6% below August but about 12% above last September and the largest on record for this month, even including the war-time September of 1918. Even on October 1 the rate was almost as large as the average for September.

INDEXES OF PRODUCTION, TRADE, AND PAYROLLS

(Federal Reserve Board)

Monthly Average 1923-1925—100



The Steel Question

THE September figures of steel production itself are quite as encouraging. Ingot output, although at a rate slightly below August, was a record for the month and about 9% above last September. Operations were at 92% of capacity compared with 88% in September, 1928 and with an average of 94.6% for the first nine months of this year.

The falling off in steel mill activity is due practically altogether to the normal seasonal letdown in automobile production, which in the first half of this year took 23% of the steel made. Despite this slackening, demand for steel is still very active, and current reports indicate that future business is improving. Even sheet mills, most affected by the automobile decline, are operating at 85% to 90% of capacity.

Rail buying, although only a routine affair at this season and a relatively small factor (6%) in steel production, is somewhat heavier or earlier than normal, and railroad equipment orders are better than last year. Building steel demand, accounting for about 10% of steel consumption, is at a high level.

Careless Driving?

MOST of the superfluous gloom about the business outlook is due to the slowing up in automobiles, and its reaction on steel. This is really another traffic congestion problem for this industry—and all closely related industries—to worry about. Petroleum and tires are showing the effects of the same kind of careless driving—failure to watch the car ahead, in which Mr. Consumer rides.

The automobile industry has shown perhaps the widest fluctuations of any important industry in recent years, dropping from about 40% above normal in 1923 to 30% below normal in 1924, running up to 45% above normal in 1925 and down again to 50% below normal in 1927. In the first eight months of this year automobile production has held about 45% above the normal. On the basis of the normal expansion in output of about 1½% per year, the production of the United States and Canada for 1929 should be slightly above 4½ million cars and trucks. This number has already been exceeded, and the industry is expecting to reach 5,600,000 before the year ends.

This is probably going a bit too fast for the buyer. The road is narrower than it used to be and there are too many cars on it, so that it is not safe to try to pass the fellow ahead.

Although comprehensive sales figures are not available, there are some indications of serious traffic congestion in this field. The production of passenger cars and trucks in the United States for the first eight months of this year was 4,223,414. New registrations of passenger cars and commercial cars for this period amounted to 3,293,827 and exports of passenger cars and trucks to 422,805. The total of new registrations and exports was thus 3,716,632, more than 500,000 short of the production in this country.

Still, the slowing up in production is not yet very drastic except in trucks. Ford still denies any plan for a shut down, and calls for 175,000 cars and trucks in October, 47,000 above last October.

What's the Matter in North Carolina?

Cry of "Reds and Atheists" Won't Serve as Complete Explanation of Textile Mills' Troubles

Photographs by International Newsreel

THE boasted industrial peace of the South has been broken by tumult and bloodshed. Up North, an unwritten code tempers the violence of mill gate riots. Last week an outbreak between guards and pickets in a Massachusetts town resulted in a few black eyes and a few bloody noses. Contrast that with the North Carolina record:

Chief of Police O. F. Aderholt, of Gastonia, killed by strikers and three of his men wounded on June 7. Sixteen members of the National Textile Workers arrested and charged with murder.

Mrs. Ella May Wiggins, striker, killed by mob near Gastonia on Sept. 14. Seven men held for this murder (but their bail was only $1,000 each).

Union leaders beaten and flogged by mobs.

Five strike pickets killed and many wounded Oct. 2 at Marion by a posse under Sheriff Oscar Adkins. The sheriff and seventeen others have been held on murder charges.

Deep grievances are back of this violence. One of the factors that lured the textile mills to the South was "docile labor." The northern mill owners apparently did not (or would not) learn that native American docility vanishes when it is too hardly tried. The result is mob outbreaks, gunfire, and funerals.

As usual, everyone is accusing everyone else. Each faction trots out a favorite alibi. The unions say it is all the result of oppression by the mill owners. The mill owners raise the old cry of "Reds" and "Communism." Between the two the workers stand in sullen bewilderment. Most of the mills have resumed operations but the air of the district remains heavily charged and greater tragedies are possible.

In the first instance there is foundation for the charge that communists were on the job. The National Textile Workers is frankly a revolutionary body. It is affiliated with the Red Trade Union International in Moscow. Professional agitators came to Gastonia to engineer the trouble. But this charge fails before the greater tragedy of Marion. Here the union involved is the conservative United Textile Workers which is affiliated with the American Federation of Labor.

Progressive mill owners admit that the burden of the blame lies with their class. There are many just and liberal mill owners but they are due to suffer for the sins of their hard-boiled brethren. The liberal element declares that contentment would have remained with the workers if their employers had not begun exploiting their ignorance and docility.

COTTON manufacturing began in the South in 1850. The Civil War wrecked the industry and gave New England a monopoly which lasted until about 1900. Until the World War the Southern mills were not important but that conflict evened the score—it gave the South an impetus which still is evident. There are now more spindles here than in the old New England centers.

There is a popular assumption that the mills moved to be nearer the cotton. Wrong. A bale of Texas cotton can be shipped by water to Fall River for less than it costs to ship the same bale by rail to the Piedmont country. (Many of the Carolina mills use Texas cotton.) The real reason for the migration of the looms was plentiful, cheap, and unorganized labor. This was the main argument employed by southern chambers of commerce and booster organizations, the lure dangled before the noses of harrassed New England mill owners. To protect this powerful talking point, there has been no violent demand in these states for legislation to cut the hours of work or to reduce the percentage of younger workers.

It is confusing to read that vigilantes of the Southern towns have been mobbing strike leaders. You would expect the mass of the community to sympathize with the grievances of the workers. The answer is that there is an antipathy between the inhabitants of the old towns and the mill villages. When the mills moved South they did not go into the towns. They wanted to escape the municipal taxes so their plants were built out in the cotton rows. There were no houses; the mill had to build its own village. Including schools and churches. (Always a church was necessary. The poor white farmers and mountaineers who made up the labor element were profoundly religious. Communists have failed with them because they scoff at God.)

GASTONIA STRIKERS DISPLAY THEIR BANNERS

Here was a manufacturer's Eden. Plenty of labor coming in from the farms. Old American stock, naturally individualistic and congenitally unsuited for concerted action. Living near the plant in towns owned by the company. The owner was able to make his own conditions of hours and pay. He was the lord of the community in which his workers dwelt. It was conducive to despotism. And despotism is full of dangerous temptations.

Everything was lovely until some five years ago. Then tribulations descended upon the cotton industry and brought to the South its first labor convulsions. Women the world over began wearing shorter skirts and fewer clothes. Prosperity indulged their passion for silk. Then rayon cut still further into the demand for cotton. Faced with waning dividends owners of mills cut costs.

Intelligent and humane owners negotiated their retrenchments carefully and had little trouble. The temptations of an autocratic position were too much for some.

Meanwhile the docile labor was beginning to display unrest. When the poor white moved in from his farm to enjoy for the first time the sweet uses of regular pay it seemed that he was bettering his condition. But he learned that expenses of his new life were higher and the conditions of his employment more irksome. By this time he had bought a Ford. He began to go places and see things and gradually he started some independent thinking. As years passed his children grew up and took jobs in the mills. They went to school. Finally when the grip of this new industrial life was beginning to squeeze, the radical labor leader appeared with spoutings of a new gospel and a promise of shorter hours, more money.

"SPREADING labor" or the "stretch-out system" has been most fruitful of dissatisfaction. A committee of the South Carolina legislature describes this as "putting more work on the employees than they can do." Its reports said that "in the card room of one mill, five sections were employed at $23 per man per week. This force was cut to four men and the pay also cut to $17.25 per week. Still later this force was reduced to three and the pay was raised a little—to $20.23 per man per week."

This form of "efficiency" has been to blame for many outbreaks. Experience of one company is enlightening. The president lives in Massachusetts. A big, hulking man with a curt voice and a jaw like a battleship's prow. He is of the second generation and he "won't stand for any foolishness." When the slump hit his mill he put in a new superintendent demanding that he cut running expenses by $250,000 the first year. This was accomplished without any serious outbreak. The president demanded for the next year a cut of $500,000.

"I think I can do it," said the superintendent.

He was wrong. He put on the pressure until he encountered the resisting point of these descendants of the Colonial revolutionaries. A mob descended on the mill, led by a lanky mountaineer carrying a looped rope. The manager left town at sixty miles an hour and has never been back.

Cuts in labor costs have been necessary. Intelligent mill owners have made reductions without arousing the hostility. Here is the way one did it:

First he explained to the men why the cotton goods market was in a bad way and asked if they would help keep the mill in operation by increasing the output per man. Then the owner did his part by tuning his looms to the highest state of perfection. Weavers were given helpers to do the unskilled tasks. Quills were laid just so. Every operation was revised so that it could be done with the least trouble and labor. Instead of laying off anyone, the regular turnover was allowed to take care of that problem. When a poor workman quit nobody was employed but his job was absorbed by picked employees who remained. In this way men who had tended 24 looms easily took over 32 looms. But most important, they were paid more money because they did more work.

A GREAT problem is curing the evils of the mill village. Most of them are built in straight, merciless lines. The houses are of the same design and they are regimented in deadly square, treeless blocks. Often there is running water, but only one hydrant for each block. Instead of keeping the houses and the streets in good repair, a small crew of shiftless darkies potters half-heartedly.

The owner cited above changes all this when he goes into a community. He builds good houses that cost $650 to $700 a room. (Rivals have boasted that they build for $400 a room.) These are varied in design and if possible are placed along curving streets. Trees are protected, and if there aren't any, they are set out. Every house has running water. Whenever possible sewers are put in. Every house is regularly painted.

The management of this company insists that the people run their own village. A mayor is elected and a board of advisors. This is an honor that the mill people strive for and respect. The manager and foremen must live in the mill village and become part of its life.

It is from owners of this type that you hear the most severe criticism of conditions in the Carolina industry. The states are to blame in that they have kept their laws lax to encourage new mills. Governor O. Max Gardner, of North Carolina, says sternly,

"We cannot build a prosperous citizenship on low wages." Then he adds hastily, "The wages which an industry can pay must, of course, be based on earnings, because it is out of earnings that wages must continue to be paid."

Meanwhile there have been some volunteers that have not been welcomed. United States Senator Wheeler, Democrat, of Montana, proposes that the Senate Manufactures Committee investigate the outbreak at Marion. (Senator Wheeler has no textile mills in his bailiwick.) This proposal brought pained and violent protest from Senator Overman of North Carolina. Senator Overman raised the ancient cry. "Reds," "Atheists."

A STRIKER, 14, EVICTED

A COMPARISON of wages and hours is not flattering to the Southern states. It is easy to see that growing resentment on this score had created unrest and invited labor agitators. In New England, labor is 34% of the total cost; in the South it is 27.3%. (This is on sheeting manufactured in 1926.) As a whole it is said that labor in the Southern textile towns is paid 20% below that in corresponding centers up North. (This is somewhat offset by a lower cost of necessities in the South.)

Night operation is another advantage enjoyed in a Southern location. Night running started during the war. It has continued since, though it is now blamed for overproduction. Many experts insist that the industry would be far better if night running were discontinued. But one operator can't quit unless all do. The saving in terms of total cost of manufacture is 3.6%—which in many cases would be the difference between dividends and none at all.

At the present time, night work for women is prohibited in Massachusetts, Connecticut, and New York. Here is an illuminating comparison of the number of working hours permitted in the different commonweals:

MAXIMUM WEEKLY WORKING HOURS FOR WOMEN

48: Massachusetts.
49½: New York.
54: Arkansas, Maine, New Hampshire, New Jersey, Oklahoma, Pennsylvania, Rhode Island, Texas.
55: Connecticut, South Carolina.
56: Vermont.
57: Tennessee.
60: Georgia, Kentucky, Louisiana, Mississippi, North Carolina.
No Limit: Alabama.

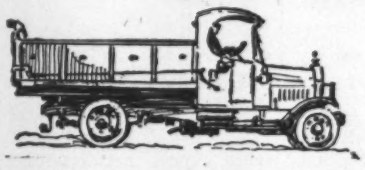
The practice differs somewhat from the law. In New England, many mills outside Massachusetts only work 48 hours a week while, in spite of the 60 hours allowed by law in North Carolina and Georgia, the majority of the mills work only 55 hours.

Liberal mill owners are frank in admitting present abuses and definite in prescribing cures. Plants and mill villages must be cleaned and beautified. Management should enter into the life of the people and treat employees as human beings. Workers should be consulted through plant committees about conditions and wages. The industry also needs: Shorter hours; abolition of night running—especially for women and children; no employees under 16 years of age; better labor legislation.

It is essential, however, that similar remedial laws be adopted by the neighboring states of North Carolina, South Carolina, Tennessee, Alabama, Georgia, and Mississippi. If this is not done present abuses will simply jump the boundary line and continue as before in new locations.

FILING CABINETS—SAFES & DESKS—BANK EQUIPMENT—INDEXING SYSTEMS—MECHANICAL BOOKKEEPING

Shaw-Walker Filing Equipment Speeds up MACK TRUCKS Offices



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THE EGRY REGISTER COMPANY
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AUTOGRAPHIC REGISTER

X-ray In Overalls

THE X-ray has already won a very definite place in industry; its uses are manifold, and are increasing steadily. The extent to which it will be employed in the future appears to depend solely upon the expense of operation and upon the development of vacuum tubes capable of handling a high voltage. The present capacity of the X-ray apparatus is limited to about 280,000 volts, but that is sufficient to permit satisfactory photographs to be made through 3½ to 4½ inches of steel, 2½ inches of brass, six inches of aluminum and through other materials in proportion to their density. Use of the apparatus costs on an average about $2 a square foot of film. This was the estimate arrived at after extensive tests by the Aluminum Company of America.

In the manufacture of castings of every type the X-ray has been used with great success. An X-ray picture of the first casting often makes possible changes in the design which greatly improve the finished product. Sometimes it is economical to X-ray castings for defects which might be disclosed only after a great deal of money had been wasted in machining.

Metal radio transmission tubes are X-rayed for proper spacing of grid and filament. Automobile tires are photographed to determine condition of union between cord and rubber. Golf balls are X-rayed to inspect centering of the cores. An insulation company examines mica with the X-ray to detect metallic inclusions which would affect its insulation value. In England all clinical thermometers are photographed to insure that they are fabricated of lead glass. The amount of tetra-ethyl lead in gasoline can quickly be determined by radiography. A few shoe stores have installed fluoroscopic units to show customers how shoes really fit. In the glass industry clays used for fire pots are inspected to discover metallic particles.

All sorts of materials, including steel, cast iron, bronze, aluminum, fibre, wood, rubber, ceramics, are thus subjected to the X-ray in various tests. And in research laboratories radiography is used to study the internal structure of wool, silk, asbestos and rayon. The results of these inspections can be portrayed on a fluoroscopic screen for temporary examination, or on a photographic film for a permanent record.

Flying Over Statistical Peaks

AN entire statistical issue of *Aviation* has brought to light some long-suspected but heretofore unconfirmed truths.

The rate of increase of production has been remarkably steady over the last four years, with an average rate of annual increase for non-military aircraft of 130%. For 1929, the increase over 1928 for civil aircraft seems likely to fall back to about 80 or 90%. In 1925 nearly 70% of the planes made were military. In 1927 the proportion decreased to about one-third, and in 1928 to less than one-fourth.

Miles of air mail airways exceeded 3,000 in 1925, 8,000 in 1926, 8,000 in 1927, 14,000 in 1928, and 24,000 in 1929. In 1928 and 1929 a substantial part of the increase has been due to contracts for foreign mails. Roughly, the scope of the air mail service doubled in 1926, doubled again in 1928, and will double yet again in the present year.

Pounds of air mail flown in 1918 were 17,831; in 1928, 3,542,074. California, with 1,464, has the largest number of licensed pilots; Vermont, with 6, the smallest number.

California also has the largest number of airports—143. Maine and the District of Columbia each have only five.

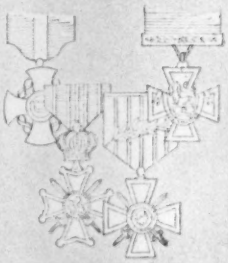
Exports in 1922 were valued at $157,290, in 1925 at $682,675, in 1927 at $1,993,569, and in 1928 at $3,651,032. Looking at total production, a trifle over 3% went abroad in 1927, the next year it had risen to 4%, and for 1929, with export markets organized, estimates run as high as 10%.

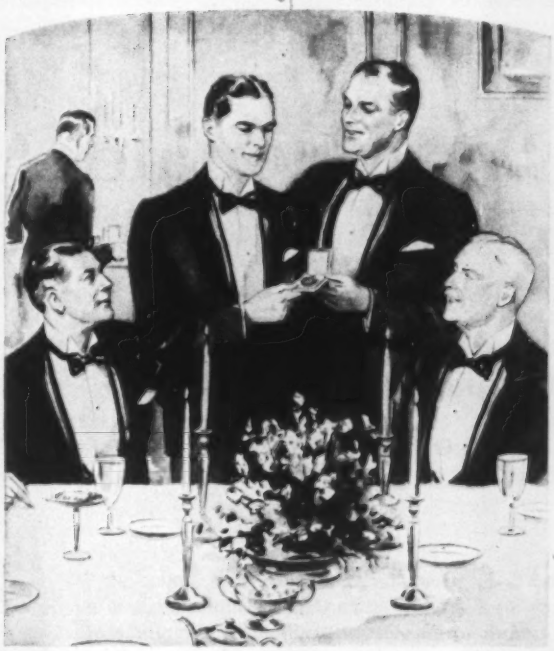
In 1928 United States air transport flew 7,390,000 miles; German, 6,345,000 miles; French, 4,345,000 miles; and Russian, 1,685,000 miles. The Germans, of all Europeans, are least timid about flying. British and French lines carried almost equal numbers of passengers but combined did not equal the passenger miles flown in Germany. France, however, exceeds in express and mail traffic. Germany is a close second. England and Holland follow but with comparatively small tonnage.

Statistics, habitually changing, are notoriously unstable in aviation. New inventions, new goodwill flights, growing public confidence, will for some time change the trend and speed the tempo of aviation development.

Among those who have been presented with the Croix de Guerre for American Achievement

GEN. LINCOLN C. ANDREWS
ADMIRAL W. S. BENSON
MR. E. G. BURKAM
HON. OSCAR E. CARLSTROM
HON. C. M. CHAMBERS
HON. JAMES M. COX
HON. JOHN W. DAVIS
HON. RICHARD P. ERNST
HON. W. J. FIELDS
MR. CLAUDE H. FOSTER





MR. J. B. GRAHAM
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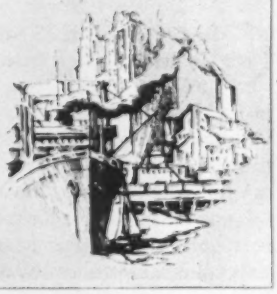
GENERAL JOHN J. PERSHING
MR. FRANK A. SEIBERLING
DEAN HERMAN SCHNEIDER
MR. CHAS. FULLER STODDARD



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As an executive, you know the value of an award for faithful service. How it quickens in every man that urge to give his *best* to the job!

Even ordinary awards serve their purpose to some extent. They stimulate ambition, effort, and loyalty throughout the organization.

But how much more effective is a *publicly recognized* award!

One that is widely known and readily identified for what it is—as a government decoration is known.

Today, for the first time in America, there is such an award—the Gruen Pentagon Watch.

A timepiece so frequently presented by individuals, groups, and business firms to honor successful men, that it has been justly called "*The Croix de Guerre for American Achievement.*"

An award recognized everywhere, by its beautiful patented shape, as an emblem of merit! At the same time, a fine watch—traditional gift to men. A watch of unique beauty, of exceptional timekeeping qualities.

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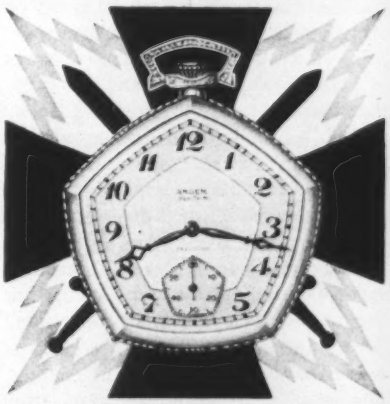

presentation to your men of notable achievement? What more profitable investment in organization loyalty?

You will be interested to know more about "*The Croix de Guerre for American Achievement,*" and how it offers the first really new and practical plan for honoring business heroes.

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Please send me details of Industrial Presentation for the Gruen Pentagon Watch, also name and address of the Gruen jeweler nearest me.

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He hopes to land big order in Canada annoyed just now over our tariff

P & A Photo

GREAT BRITAIN'S prime need is to obtain relief from unemployment; Canada's prime ambition is to find freedom from economic domination by the United States. Statesmen of both countries believe that these aims can be made to serve each other, that a solution of their economic problems may be found in a closer economic relationship, ultimately to embrace the entire British Empire. That is why the Right Honorable J. H. Thomas, Lord of the Privy Seal and unofficial minister of employment, spent three weeks in Canada.

That is why Ramsay MacDonald himself is going to Canada at the conclusion of his conversations with President Hoover. It will be the principal subject upon which he will confer with Mackenzie King, Prime Minister of Canada. The importance which both attach to the meeting is indicated by the inconvenience to which each has submitted to bring it about. Mr. MacDonald arranged matters, before leaving England, so that nothing would interfere with a three-day trip to Canada. Mackenzie King postponed a western political tour in order not to miss the opportunity of meeting Mr. MacDonald.

The impulse to this Anglo-Canadian movement originated almost simultaneously in both countries. Canada initiated it, impelled by the realization that the American tariff revision program would bear heavily upon Canadian trade. The time was opportune, for the new Labor government had just come into power pledged to put the unemployed to work. The British government responded immediately.

Now, the movement is under way. Its first important accomplishment is a determination to hold an Empire economic conference as early as possible. No official decision or arrangement has been made regarding the conference, but the several governments are agreed that it should take place. It is expected that the project will materialize more fully at the consultations between Mr. MacDonald and Mr. King next week.

Unquestionably, it will be one of their first concerns. The conference probably will be held at Ottawa, early next year, time and place depending somewhat on the convenience of the governments of the more distant Dominions. The purpose of the conference is to seek ways and means of promoting and encouraging trade within the British Empire.

The economic requirements of the several parts of the Empire vary. Their fiscal policies differ. Geographical conditions have established divergent trade tendencies. These are some of the obstacles in the way. But powerful voices, especially in England and Canada, are urging that such individual concessions or sacrifices as might have to be made to bring about something like an imperial economic union would be more than offset by the benefits to every part of the Empire.

Canada and Great Britain, meanwhile, are not waiting idly for the Empire conference, but are seeking between themselves the accommodation of their immediate requirements. Behind both governments is the spur of urgency.

Already a substantial start has been made. Right Hon. Mr. Thomas, during his "commercial traveler's" visit to Canada this summer, succeeded in making tentative arrangements with some large industrial institutions for the purchase by them of considerable quantities of British coal and British steel, to re-

place American coal and steel. Since his return to England, he has been negotiating with the Western wheat pools on a plan for bulk purchases of Canadian wheat by the British government. The idea in respect of these proposed bulk purchases is that, in the interest of economy, the ships taking the wheat to England must have return cargoes of British goods for Canada.

In approaching their problem, both the British and the Canadian statesmen have in mind, of course, the heavy discrepancy between Canada's balance of trade with the United States and her balance of trade with Great Britain. During the twelve months ending last August 31, Canadian imports from the United States amounted to $899,693,000, while exports to the United States amounted to only $520,728,000. From Great Britain, on the other hand, imports were only $197,916,000, as against exports of $371,004,000.

Metals form nearly a half of the imports from the United States, and it is here that Great Britain sees opportunity for a considerable replacement. For political reasons, the present Canadian administration has been impelled to ignore, or to minimize the consequences of, the large adverse balance of trade with the United States. But the necessity for an adjustment of Canada's trade, by tariff revision or otherwise, can no longer be denied.

As was indicated in the utterances of Mr. Thomas when he was in Ottawa, economic co-operation between Great Britain and Canada contemplates not only trade development, but also increased industrial adjustment and financial exploitation. British industrialists are being urged to consider the establishment of branches in Canada and there is a prospect of larger quantities of British capital being employed for the development of natural resources.

Britain's Drive Aimed at Our Export Coal

THE British government, struggling to readjust a coal mining situation badly dislocated by the World War, not many months ago was advocating the exportation of surplus mine labor to other parts of the British Empire. Today, the Labor party seems to be trying to increase employment by enlarging the export market for British-mined coal.

This shift of policy directly interests the United States because the first objective seems to be an increased consumption of British coal in the one large foreign market our coal producers have—the Dominion of Canada.

For generations coal played a vital part in the international commerce of Great Britain. It enabled her to purchase raw materials upon favorable terms. It had a marked influence upon ocean freights; coal was carried outbound at a nominal rate because the vessel owner was assured of a profitable return cargo. In 1913 British shipments of export and bunker fuel had risen to approximately 72,000,000 gross tons. Last year British foreign business in coal was 20,000,000 tons behind 1913.

British coal export troubles grow out of the territorial changes made in the Versailles Treaty. Germany has made up territorial losses by intensified exploitation of her remaining resources, particularly lignite or brown coal. Poland has become important. France has more coal within its borders. Other European countries have developed internal fuel supplies.

So the campaign to recover lost markets has been an uphill fight for Great Britain. Her stubborn traditions and peculiar features in mineral land-holding block modernization. Germany and France have modernized.

Except during the war and during brief periods of British coal strikes, overseas shipments of United States coal have been small. Canada got 86.3% of our 1928 total exports of 14,432,376 gross tons of bituminous. Canada also has been by far the major foreign buyer of Pennsylvania anthracite.

IN the light of these facts, what are the possibilities of the new British drive on Canada? It does not seem likely much British coal can be sold to the Canadian railroads. Canadian railroads have been taking about 5,000,000 net tons a year from the Canadian mines and substantial quantities of coal from the United States. Canadian rail interests control mines in the United States with a capacity of 3,000,000 tons a year. British coal producers can hardly make offers sufficiently attractive to induce the Canadian railroads to close down these mines.

Increased Canadian buying of British coal in exchange for increased British buying of Canadian wheat immediately raises the question: who will lose the wheat business? If the countries from which Great Britain stops buying wheat have been good buyers of British coal, will they continue to be? And if not, will they buy more United States coal? What, for example, would be the effect upon the Argentine of such a program? The Argentine is buying 2,600,000 gross tons a year of British coal. Exports from the United States to the Argentine dropped from 210,000 tons in 1927 to 32,000 tons last year. If the Argentine's wrath were aroused against Great Britain, would coal exporters in the United States be the gainers? Or German producers?

The drive to sell Welsh anthracite in Canada really means something to us. It started a few years ago and has been pushed with fluctuating success ever since. Exports of Pennsylvania anthracite to Canada have been below 4,000,000 tons since 1923; indeed, in the past two years, the totals have been under 3,000,000 tons. Not all of this decline can be charged to the competition of Welsh coal; other substitutions have played their part. But the Welsh importations have been an important factor. Competition of Russian anthracite in the European market promises to make competition between Welsh and Pennsylvania coals in Canada still keener.

Finally there is the attitude of Canadian coal producers to be considered before the market can be handed over to Great Britain. The Canadian provinces are now producing at the rate of 17,000,000 net tons a year—about half current requirements of the Dominion. Some of the provinces, particularly Alberta, entertain strong expansion hopes of their own. If there is to be any sharp change in sources of Canadian fuel supply, these interests will have something to say. Canadian parliaments and railroad officials have heard their voices before.

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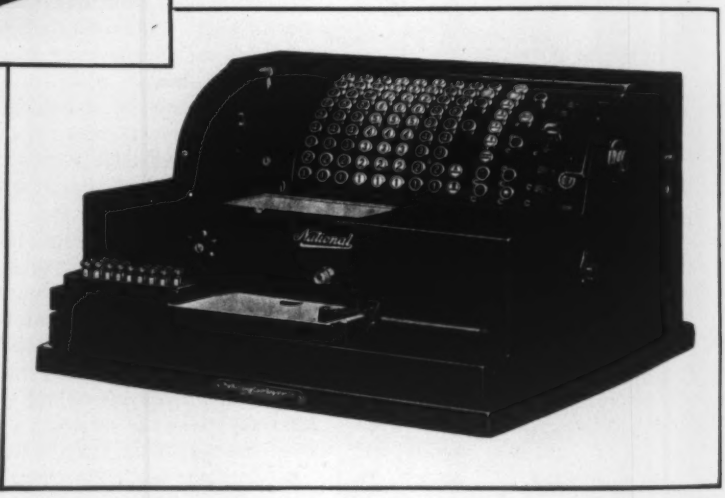
The National Accounting Machine **(Ellis Model) is the only accounting machine which combines a standard 81-key visible adding keyboard, a standard visible typewriter and complete visibility of printing. It posts accounts receivable and payable, customers' statements and general ledger accounts. Many banks use it for posting commercial accounts and other work.**



The National Posting Machine **mechanically posts in clear, legible type on ledger card, depositor's pass book or customer's receipt book, and journal sheet at one operation without the use of carbon paper. It adds the amount of posting to or subtracts it from previous balance and mechanically computes new balance, printing on ledger card, journal sheet and customer's book at the same time.**

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Today, in addition, it furnishes *every* business with accounting machines, analysis machines and posting machines of the same high standard.

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National Accounting, Posting and Analysis Machines are in use in banks, offices, wholesale and retail establishments, factories, hotels, clubs, fraternal organizations, and installment houses.

They bring speed, accuracy, economy, protection and complete information to the operation of every business. They furnish compact, printed, unchangeable records. They make possible simplified business systems.

The National Cash Register Company puts into the design and manufacture of these newer products the experience of half a century in providing efficient business machines to fill specific business needs.

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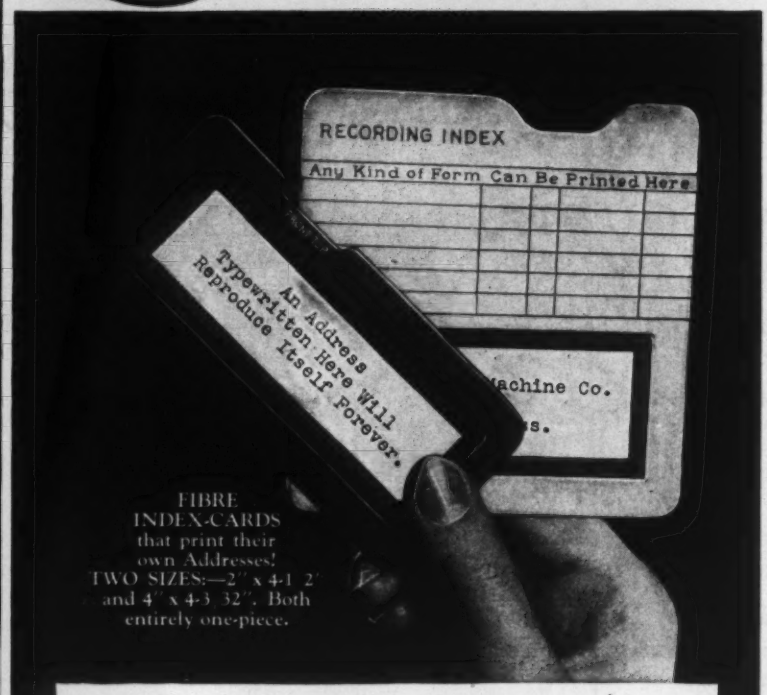
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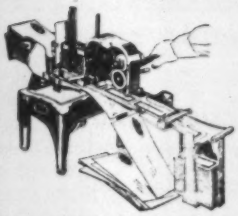

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Check what is wanted at left, attach to your business letterhead, and address to the Elliott Addressing Machine Co., Cambridge, Mass., U. S. A. (or 84 St. Antoine St., Montreal, if you are in Canada).

Marquette Tries Cement Roadbed

PERE MARQUETTE trains began running this week, at twenty miles an hour, over a short stretch of new concrete roadbed fifteen miles west of Detroit, adjoining a quarter-mile experimental stretch, of somewhat different construction, which has been in use for three years. F. H. Alfred, former Pere Marquette president, later operating vice president, fathered the experiment. He has left the road, but his successor, Robert J. Bowman, a Van Sweringen appointee, sees "no reason why it should not be carried on." H. A. Cassil, chief engineer, says that the concrete roadbed built three years ago has held up, and that rails laid on a solid base do not appear to be battered down any more than is normal on a flexible, rail and ballast, roadbed. He believes that to strive for a nearly permanent roadbed looks like a step in the right direction.

Concrete has never before been used on main lines, but is nothing new in track construction. It is often used in terminals and tunnels. In Detroit the Union Produce Terminal has ten miles of track set in solid concrete, and two hundred miles of the New York subway, now under construction, will have rails on wooden blocks on a concrete base.

Railroad men, however, differ as to the value of concrete. Some favor it, saying that it will reduce maintenance costs and, with electric locomotives, roller bearings, and brake drums on axles, will permit speeds of one hundred miles and up. Others say that maintenance costs have already been reduced on some roads almost 50% since the war, that flexible roadbeds increase the lives of rails and rolling stock, and that the public wants absolute reliability rather than greater speed, which would mean greater hazards. It would be possible now, they say, to operate 16-hour trains from New York to Chicago, but the risk involved would be too great.

▼

ALUMINUM paint is being used more and more as an undercoating on wood. It is impervious to moisture, opaque to light, and of high durability. Used as a priming coat with two or more coats of ordinary paint over it, unusual durability and protection are being obtained.

BACK OF THE SATISFACTION OF OLDSMOBILE OWNERS STANDS THE SATISFACTION OF OLDSMOBILE WORKERS IN A JOB WELL DONE

After all, what is a motor car? Is it merely so much wood and metal . . . so many gears and cotter-pins?

Or is it, as Oldsmobile workers believe, something more . . . the culmination of the skill and ideals of the men who build it, from the first engineering sketch through to the final check-up and inspection? To express this spirit one of these workers—a veteran milling machine operator in the Oldsmobile factory—coined the phrase, "Anything short of my best is not acceptable." And this charge of responsibility has been adopted by his fellow workers throughout the organization, as their plant slogan.

Oldsmobile engineers are constantly at work—proving and re-proving the product they design—testing the merit of new ideas—ever seeking the better thing. In addition, they call upon the vast resources of the General Motors Proving Ground and Research Laboratories. Always, they have in mind . . . "Anything short of my best is not acceptable."

Skilled operators, unerringly guiding great machines—efficient workmen, accurately fitting Oldsmobiles together, part by part—keen-eyed inspectors rigidly checking the work of the producers—each man, whatever his job, from the highest executive to the newest shop employee, follows the same rule . . . "Anything short of my best is not acceptable."

The result is a standard of precision, a degree of accuracy, worthy of the finest cars.

The satisfaction of Oldsmobile workers in a job well done is largely responsible for the thorough satisfaction Oldsmobile owners find in their cars. Oldsmobile owners are loyal, because they know that Oldsmobile is loyal to its owners, not only in the matter of fine workmanship but in all the details of manufacture—in the quality of materials, in the progressiveness of Oldsmobile engineering, and in the generous measure of Oldsmobile value.

This owner enthusiasm is reflected in Oldsmobile's tremendous and ever-increasing success. Month after month, Oldsmobile sales continue to grow. Time after time, new owners write, "My neighbor praised his Oldsmobile—and I find that everything he said is true."

Oldsmobile respects this public confidence. And, in return, Oldsmobile promises the public, in behalf of every Oldsmobile worker, to maintain steadfast allegiance to the Oldsmobile pledge: "Anything short of my best is not acceptable."

OLDSMOBILE

PRODUCT OF GENERAL MOTORS

1929: The mails zoom overhead . . . Voices and images fly through the ether . . . Filling stations line roads clogged with the restless citizens of a new nation unified by transportation and communication . . . An engineer and a business man is President . . . The wheels of business revolve faster and faster, setting in motion other wheels . . . Inventions enlarge horizons, give birth to new industries, annihilate old ones . . . *Business expands, accelerates . . .*

The Business Week is the answer to the new compulsions of spread and speed. It provides the business man, each week, with the timely, complete and accurate record and interpretation of all the news that touches the conduct of business. News gathered—for the most part—at the source . . . News, rated, not as entertainment, not as it affects a specific business or industry, but for its bearing on business as a whole.

Business today needs a paper to carry the news of textiles to the banker, the news of banking to the manufacturer, the news of manufacturing to the merchant; a paper to serve that important group of business men who still lack the news outside their immediate ken which influences their immediate business. This *new* news is the compelling need of business today.

To accomplish this with speed and dispatch, The Business Week is generously staffed editorially. Competent editors and newsgatherers, recognized economists, staticians and feature writers produce a publication so thorough in its coverage, so interesting in its treatment, and above all, so *timely* in its closeness to the news, that it marks a new era in publishing.

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BW 1013

Mexico Told What Labor Code Does

IN MEXICO the Portes Gil government, favored by Labor, has published its new industrial code (THE BUSINESS WEEK, Oct. 5), bristling with demands on employers, glowing with promises to labor. Workmen, unfamiliar with economics or with intensive industrialism, are pleased; industry, taxed to the point of bankruptcy, is exasperated; capital, largely foreign, is ready to withdraw. Adoption of the code, which now seems entirely probable, may be the last straw which will make the burden of industrial operation too heavy to be borne any longer.

Proud members of the Mexican Congress this week are listening to the arguments of large-scale industry against the code. Impressive, startling, were facts presented by grim, practical Hilary N. Branch, spokesman of the petroleum industry and chief counsel in Mexico of the Mexican interests of the Standard Oil Company of Indiana:

"Petroleum production in Mexico, dating from 1901, reached its peak of 193,000,000 barrels in 1921 and since then has been declining rapidly. In 1925, production totaled 115,000,000 barrels, in 1928, 50,000,000, and in the first half of 1929, 21,000,000.

"Mexican government revenue is diminishing from decreased tax returns.

"In 1921, the petroleum industry employed 50,000 in Mexico with an annual payroll of 120,000,000 pesos; in June of the present year, 14,000 were employed with a payroll of 34,000,000 pesos.

"In 1921, 21 companies were exporting petroleum, representing 92% of that year's output. Today 11 are left. Of these only five show profits. Four principal companies show total losses over four years of 44,000,000 pesos."

American banks financing cotton interests in Lower California last week withdrew their credit pending Congressional action on the proposed labor law. Yet to appear before Congress is the representative of these 15,000 Mexican cotton growers. He will tell Congress that "this region will certainly become stagnant again if this law is passed as proposed; interests of 15,000 Mexicans who, without complaint, resist the penalties of severe climate will be violated; an attempt at diversification of industry will be crippled if not lost."

FACTS.. FACTS..

that's what fleet operators want

HERE are four facts about Ethyl Gasoline:

1. Ethyl is good gasoline turned into *better gasoline* by the addition of a vital ingredient—Ethyl fluid. This is an anti-knock compound containing tetraethyl lead, developed by science to make gasoline a better motor fuel. That it does this is proved by the fact that leading oil companies in the United States, Canada and Great Britain mix it with their gasoline to form Ethyl Gasoline.

2. By eliminating "knock" Ethyl brings out of any engine an additional power which cannot be obtained with ordinary gasoline. This means less strain on engine parts over long hauls and on hills. It means reduced gear shifting and consequently better control under all driving emergencies.

3. Ethyl speeds pick-up and getaway in traffic. Applied to every unit of a fleet and multiplied by the days of the year this means a substantial saving in time and operating costs.

4. With Ethyl it is not necessary to lay up equipment for frequent carbon removal. Usually this job takes equipment out of service for a day. That wasted time is saved with Ethyl.

Executives of companies operating fleets of motor vehicles are invited to look into Ethyl's possibilities as an operating economy. Write to any of these offices:

Ethyl Gasoline Corporation, 25 Broadway, New York City; 56 Church Street, Toronto, Canada; 36 Queen Anne's Gate, London.

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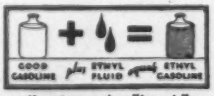

Knocks out that "knock"

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POISE-will speed PRODUCTION in your office and plant

The secret is largely correct poise, the condition of mental and physical freedom which makes it easy for the worker to do his best. Eff & C Chairs are, in a true sense, "tools of production". They are scientifically designed for correct seating, maintaining an alert, restful posture.

Eff & C Chairs, due to their better, scientific seating, are replacing wasteful loss of preventable fatigue, which takes its toll from every office and industry, with easeful, sustained energy.

Eff & C Chairs help to quicken and smooth office routine operations, promoting speed, accuracy, and ease for the workers operating office machines and appliances. They mean a bigger and better day's work. These chairs are easily adjusted to the individual without tools, and while a scientifically designed product they cost no more than ordinary chairs.

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Your local office furniture dealer maintains Eff & C Chair Service. Send the coupon for literature, or, better still, have us send one of the chairs.

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The Fritz-Cross Company
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Please send us your booklet, "What underlies efficiency".

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Newspaper Sells Herd Bulls

BULL selling is one of the important activities of the *Minneapolis Tribune*. In a month and a half 120 pure bred sires have been placed on Renville county farms by *Tribune* representatives. They will continue until the whole state has been covered.

This is the way F. E. Murphy, *Tribune* publisher, is encouraging agricultural and business prosperity in the Northwest. A successful livestock breeder himself, he knows scrub stock keep the farmer poor. One cow giving 400 pounds of butterfat a year brings higher net cash income than 10 cows giving only 100 pounds of butterfat each. In addition the one good cow requires only 170 hours of labor yearly while the 10 scrubs demand 1,600 hours of work.

Farmers who own scrubs say they cannot afford to replace them with high grade stock, but Mr. Murphy solves the problem by selling pure bred sires.

Mr. Murphy thus is helping build a prosperous agriculture with the steady buying power so important to Northwest business.

In Friesland dairy cows give an average of 432 pounds of butter; in Holland 341 pounds. In Minnesota the average is only 181; in North Dakota, 171; in Montana, 168; in South Dakota, 147.

"We have set a goal of 500 pounds of butter from every cow in the Northwest," says Mr. Murphy.

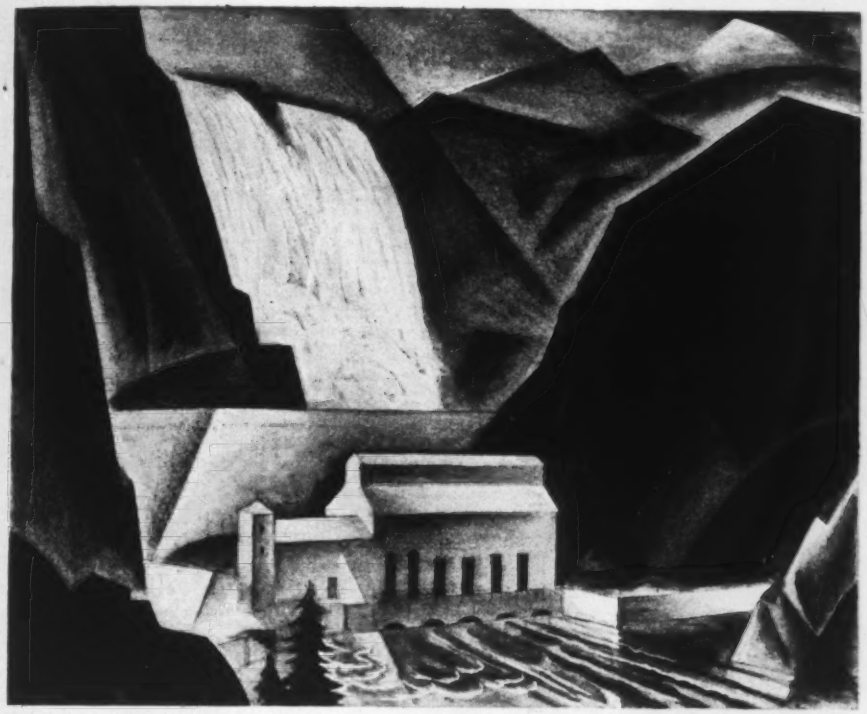
The Tribune became interested in two years ago. It has placed, with the aid of bankers and other business men, 2,600 pure bred sires in 28 Minnesota counties. The average price of the bulls has been $138, delivered.

▼

Small Farms Bother Cotton Mills

LACK of uniformity of the cotton fiber, according to Henry L. Tiffany, cotton spinner of New Bedford, Mass., is a major problem in the cotton industry today. Replacement of large plantation owners by independent small cotton farmers has resulted in the planting and cross-pollenization of various grades of seeds. The value of cotton consists largely in uniformity of fiber—whether it be all long or all short.

The solution, Mr. Tiffany says, lies in voluntary community action by the cotton growers themselves in each district.



Electricity Nearer Its Goal

Not so many new customers, henceforth, but steadily growing consumption

ELECTRIC light and power companies are finding fewer new customers this year than in 1928. As a statement of bare fact, the announcement is unquestioned. An analysis of reports received regularly by *The Electrical World* does not quite support the estimate of an increase during 1929 only two-thirds as large as in 1928, but does indicate a decided drop, apparently about 20%.

The greatest increase in new customers was recorded in 1924, when it exceeded 2,000,000. In 1925 it fell to 1,700,000. In 1926 and 1927 it rose to 1,800,000, but decreased to 1,300,000 in 1928, the total number at the end of that year being 23,400,000. For 1929 *The Electrical World's* estimate, published last January, was 19,700,000 residential users of current, 3,450,000 commercial, and 1,050,000 power and miscellaneous, a total of 24,200,000. In other words, smaller gain is predicted because the new customer curve is clearly flattening.

What do these facts signify? Why has the number of new customers been decreasing since 1924? Is there any cause for pessimism?

During the early part of the present decade less than half the homes in the United States had electric service. It should be remembered that residential consumers constitute about 80% of the total number. Stores and commercial establishments account for another 15%. The remainder are industrial plants. In energy consumption, of course, the averages are reversed. But only numbers are being considered here, not energy consumption.

So long as plenty of potential customers were within reach of electric service, the advantages of electricity being generally admitted, it was not remarkable that the customer increase was rapid. Only about 30% of our people are now without central station service. A great many of them are on farms to which it is out of the question just now to run electric lines.

IT IS obvious that as more and more homes are electrified, fewer and fewer potential customers remain. Last year the increase in new customers was still 6%. But our annual population increase is only about ½ of 1%. A 6% increase in users of electricity cannot continue to chase, indefinitely, a smaller increase in population. Eventually it will catch up. Or, rather, it would catch up if it continued its pace. Actually, the pace of consumer increase tends to become gradually slower. Only a few years ago it was 10%. We may expect the addition to be smaller each year, even though there are yet some 10,000,000 American families without service, and a correspondingly large number of other potential customers.

BUT if the new customer increase is going to be smaller year by year, will not the manufacture and sale of electric appliances and equipment be injuriously affected? Will not there be dislocation of employment and business?

The most commonly used electrical appliance is the flat-iron. On the basis of annual surveys, it is estimated by *Electrical Merchandising* that 17,700,000 families use that convenient article. It is manufactured at the rate of about 3,000,000 a year. Flat-irons are durable, but not indestructible. Replacements alone would demand a large annual

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912

OF THE BUSINESS WEEK published weekly at Greenwich, Connecticut for October 1, 1929.

STATE OF NEW YORK } ss.
COUNTY OF NEW YORK }

Before me, a Notary Public in and for the State and county aforesaid, personally appeared C. H. Thompson, who, having been duly sworn according to law, deposes and says that he is the Secretary of the McGraw-Hill Publishing Company, Inc., publishers of THE BUSINESS WEEK and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 411, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are: *Publisher*, McGraw-Hill Publishing Co., Inc., 10th Ave. & 36th St., N. Y. C.; *Editor*, none; *Managing Editor*, Marc A. Rose, 10th Ave. & 36th St., N. Y. C.; *Business Manager*, Jay E. Mason, 10th Ave. & 36th St., N. Y. C.

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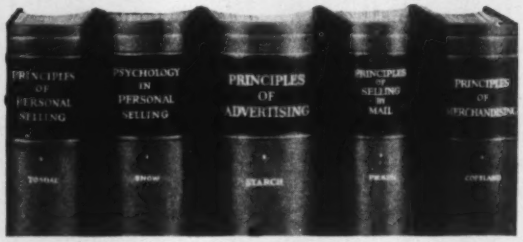
3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

5. That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is.....(This information is required from daily publications only.)

C. H. THOMPSON, Secretary McGraw-Hill Publishing Company, Inc.
Sworn to and subscribed before me this 28th day of September, 1929.
H. E. BEIRNE, Notary Public [SEAL]
(My commission expires March 30, 1931.)



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production. Or consider vacuum cleaners. The yearly output is about 1,100,000. They are used in 7,700,000 homes. Here, too, replacements, plus new business, would seem to justify an almost indefinite continuance of the present rate of manufacture.

Such appliances as toasters, percolators, and waffle irons are relatively new. Output in 1927 was, respectively, 1,200,000, 800,000, and 600,000. Their use is increasing rapidly, and the market is far from saturation. Indeed, replacements and new business actually in sight indicate a considerable expansion. The outlook is similarly encouraging for the makers of washing machines, ironers, refrigerators, fans, sewing machines, heaters, etc., many of which are destined to come into far more general use than at present. With some 20,000,000 homes as potential customers, it makes little difference to these branches of the industry whether the increase in new customers for the light companies is a million, or somewhat less.

CONTINUAL growth of the light and power industry is clearly bound up with the manufacture of heavy machinery and equipment. Aside from replacements, new electric generating equipment is being installed at the rate of 2,000,000 kilowatts a year. With it, of course, go boilers and other devices. There are no signs, thus far, that this would stop even if the light companies could find no new residential customers. Moreover, a diminished growth in the number of new customers may be balanced by increased average use of electricity. The all-electric home is a definite possibility for the not too distant future. And with the consequent large consumption, much of it at times and under conditions that do not increase the power companies' overhead, it will be possible to sell current much cheaper than is now possible. A benevolent circle will be placed in operation—lower rates will mean increased consumption, and increased consumption will mean lower rates.

Finally, there is the huge power load. Industrial plants already consume three times as much energy as is sold to all the homes and stores in the United States. The power load is growing more rapidly than the lighting load, and the limit cannot be foreseen. Not even the turning point, to say nothing of the end, is in sight.

The obvious conclusion, then, is that the progressive decrease in new light and power customers is neither an unexpected phenomenon nor a calamity.

1921-1929

The American Founders Group of Companies

DECORATIONS BY ROCKWELL KENT • CUT IN WOOD BY J. J. LANKES

WHAT is now the American Founders group of investment companies began in April, 1921. International Securities Trust of America was then formed "to invest, sell and reinvest [its] assets... in American and foreign bonds, stocks and other securities."

International Securities Corporation of America, the successor company, is one of four general management investment companies —often called "investment trusts"— included in the American Founders group. The group borrows its name from American Founders Corporation, whose business was established in 1922 and which provides research service and investment supervision for the affiliated companies.

The American Founders companies practice systematic investment of their funds under active and careful management, which policy has brought better than average results.

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Investment bankers and banks with security departments will furnish information and counsel concerning any of the investment companies that compose this group. Or it may be obtained from Founders General Corporation, 50 Pine Street, New York City.

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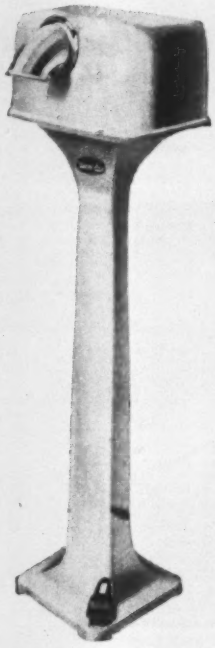

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Electrical Division, Dept. 10 F

CHICAGO HARDWARE FOUNDRY CO.

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Old Man River Rejuvenated

GLORY of the old steamboat days comes back to the Ohio next week with the opening of the river jubilee. A banquet at Pittsburgh Oct. 17, a steamboat parade down river, a celebration with President Hoover at Cincinnati Oct. 22, and lesser celebrations all the way to Cairo will proclaim completion of the river's canalization.

Since 1913 the government has been building dams and locks from Pittsburgh down to Cairo, and now, after an expenditure of $85,000,000, the whole 968 miles is navigable at a nine-foot stage of slack water the year round. There are, on this stretch, 53 dams with their locks, and the last ones have just been completed on the lower end. The "liquid stairway" lifts a vessel 426 feet between the Mississippi and Pittsburgh.

"Rivers," wrote Benjamin Franklin, "are ungovernable things," but he did not figure on modern engineering. A new trade empire is opened up to Pittsburgh. All the cities of the Ohio valley share.

Steel mills have been using the full length of the river since the Jones & Laughlin Steel Corporation sent its historic tow down in the fall of 1921, just to prove it could be done. This was the first shipment of steel on the river in a decade. Immediately other companies took up the idea. In 1928 the movement of iron and steel products from the upper Ohio to the Mississippi reached 275,000 tons. This year the total will be much larger.

By using the river, Pittsburgh mills cut into territory which had been securely Chicago's and Birmingham's. Chicago is concerned, and this explains much of the Chicago pressure for a waterway to the Mississippi. Pittsburgh was shoved 400 miles nearer the gulf and Chicago could do nothing about it.

Even the Bethlehem Steel Co. finds it worth while to ship from its Johnstown (Pa.) plant for loading into river boats at Glassport, above Pittsburgh. This year the Youngstown Sheet & Tube Co., at Youngstown, O., has been shipping pipe to its warehouse at Memphis, via river docks at Ambridge and Fairlawn, Pa.

Other important users of the Ohio for steel shipments are Carnegie Steel, American Steel & Wire, Pittsburgh Steel, McKeesport Tin Plate, Weirton Steel (now National Steel), Wheeling Steel and, of course, Jones & Laughlin. J. & L. has its warehouses at Cincinnati, St. Louis and Memphis. Carnegie has been shipping to its warehouses at Houston, Tex., by river barges as far as Baton Rouge and by gulf barge the rest of the way. Carnegie's marine equipment is now the largest on American inland rivers.

The typical tow of steel products consists of a steam or diesel-powered towboat, costing as high as $400,000, and as many as eighteen barges carrying up to $1,000,000 worth of steel products. Cargo is mostly wire and fencing, cotton ties, galvanized sheet and tin plate, oil well pipe, fabricated structurals, pig iron and semi-finished material. The steel barges on the Ohio average 725 tons capacity each, the wooden barges half that, but the Pittsburgh builders have standardized a river service barge, of steel plates, 175 feet long and 26 feet wide, and this when loaded for the nine-foot drafts has a capacity of 1,000 tons.

The shape of the barge is a return to the flatboats poled down the river by the pioneers. Building them is a sizeable industry of half a dozen plants. River boat builders' yards are all busy this fall.

Government engineers estimate that $30,000,000 to $35,000,000 worth of floating equipment has been added to the Ohio fleets in the last five or six years, and of this at least half is Pittsburgh's share. Terminals constructed since 1922 are worth $35,000,000 more. The modern rail-and-river terminal replaces the mudflat and gangplank with a concrete or floating wharf. There are electric hoists and conveyors, locomotive cranes or gantries, and clamshells. St. Louis spent $1,000,000 on a municipal terminal while Memphis has spent about $1,500,000 on different units, not to mention what the steel companies have invested there.

Pittsburgh began to ship iron kettles and nails down the Ohio river more than a century ago (Robert Fulton built the first river steamboat there in 1811) and before the Civil War she was doing a large business in cotton ties and bar iron. In the closing years of the nineteenth century the river commerce dried up.

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Nothing New Under the Sun?

To Keep Ears From Burning

CHILLED telephone receivers are the latest contribution to comfort. London subscribers can be furnished with telephone receivers filled with a freezing mixture which will keep their ears cool during the hottest conversation. It was first tried out a few days ago on a transatlantic call to New York. The user talked for half an hour without getting overheated.

▼

Stamps, Sweet Potato-Flavored

LICKING stamps or envelopes is horrid because the stickum is made of tapioca, said chemists of the Bureau of Chemistry and Soils. The sweetest stickum in the world, just discovered, is dextrin, made from sweet potatoes. Twenty per cent of the country's 80,000,000 bushels of sweet potatoes are cull, either too little or too big for use. Monsters weigh thirty pounds. Out of these would the chemists have all our stamp and envelope mucilage manufactured.

▼

Angle Worm Ranch Prospers

NO longer need the disciple of Izaak Walton break his back digging worms. Select specimens, raised on an exclusive angle worm ranch and shipped to market in tin cans, are for sale.

R. B. Bikolsky has already shipped eastward this year more than 300,000 angle worms from his ranch at Alhambra, Calif. A million more baby worms are being fattened on corn meal for next year's fishermen. When they reach bait size, they will be packed in imported moss, placed in tins resembling large paper cans, and shipped. They can live six weeks without additional water.

Mr. Bikolsky entertains a high regard for his product. He says the worms are monogamists, they won't kill each other, and they mind their own business. They mature in two years and often live to be twenty years old—if the fisherman's luck is that bad.

▼

Electric Heat For Ladybugs

ANOTHER opportunity for the electrical industry—heating ladybugs. California orchardists and vegetable growers are menaced by an insect known as the mealy bug which destroys trees and plants. Ladybugs, it was discovered, live on mealy bugs, so ladybug culture is thriving and huge quantities of the insects are being made available to the farmers by 15 county citrus associations. Cabins have been built, carefully ventilated, and, because the ladybug demands warm, even temperature, electric heaters are used. California electric companies are rejoicing in a new "load."

▼

Ether Waves Displace Arm Waves

TRAINMEN in the yard service at the West Works Plant of American Rolling Mill Company at Ashland, Kentucky, have to get their arm-waving exercises outside of working hours now. Two-way radio communication systems have been installed between engineers and train dispatcher.

Experiments have been made with radio communication on long freight trains but this appears to be the first radio installation for industrial plant train service. Transmitters have a range of about five miles. Loud speakers provide sufficient volume to enable engineer to get instructions in the locomotive cab without earphones.

▼

MEXICAN physicians have made successful use of ethyl alcohol as an anesthetic in surgical operations. Dr. Garcia Marin invented the use of ethyl alcohol for the purpose and Dr. Ortiz developed a method for injection of ethyl alcohol.

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A similar rule should apply to the selection of papers for business forms. Rag-content alone is *not* a safe index of a paper's strength and durability. It is the quality of the rags, and the percentage used, in bond, ledger and bristol papers that constitutes a reliable purchasing standard.

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The service of the Bureau is to make a thorough quality and utility analysis of the paper in every form you employ. When it is finished you have a comprehensive report which establishes quality standards, fixes price limitations, suggests economies and simplifies buying procedure. Because of the scope of this service it can be rendered only to a limited number of corporations in 1929. It is made without charge or obligation of any sort.

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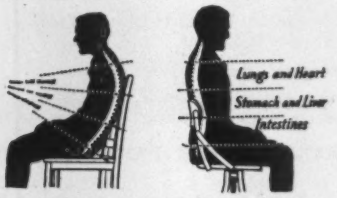

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The Week's BUSINESS Speeches

DR. JOHN GRIER HIBBEN, president of Princeton University, to undergraduates:

"If education is what remains behind you when you have forgotten all that you have learned, as someone has said, what is it that is left to us? A mind, a tempered and skilled instrument of realizing the processes of the will, a depository of ideas gained from study, contemplation and experience, a creative power to make possible the things regarded as impossible, surmounting obstacles regarded as insurmountable, a creating power, a discerning faculty separating the essentials from the nonessentials in a mass of confused and chaotic facts, penetrating to the heart of a subject in any new and unfamiliar situation, a mind that is the enemy of sophistries, of loose thinking, and of hasty and ungrounded generalizations."

We need more patience, more faith, in the general purpose of our people and in the wisdom of ultimate economic developments. Our assurance for the future is in the fidelity with which we discharge each day's responsibilities.—Craig B. Hazelwood, retiring president, American Bankers Association.

GEORGES CURCIN, Yugoslav employers' representative, at Geneva International Labor conference:

"One can applaud Mr. Ford's gesture (introduction of higher wage scale in Europe) so long as philanthropy does not make itself the handmaiden of competition, but we do not know where competition begins with Mr. Ford and where philanthropy ends."

The time has come when business problems should be dealt with as an art and when business management should be established as a profession. . . The development of our physical sciences has been more rapid than our social sciences, and so it is especially important that from now on we have on the field of business men who are broadly educated in economics and politics as well as men trained in the technical details of our business machinery.—Owen D. Young.

R. T. HIGGINS, chairman Connecticut Public Utilities Commission: "If we ever have government ownership of public utilities in this country it will be brought about by the utilities themselves combining and operating for unreasonable private gain and against general public welfare. Individual groups may at times be unreasonable, but the combined public sentiment of a nation is bound to be in keeping with its moral standards and represents a force that must and will be recognized."

The successful salesman in most foreign countries is not the go-getter but the one who knows his product and is in no hurry to get it across.—R. J. Archer, general manager, John N. Willys Export Corporation.

CHARLES EVANS HUGHES, former Secretary of State:

"The life insurance business has brought the maximum certainty out of life's uncertainties. It has long been said that nothing is so certain as death and taxes. The policyholder knows that there is nothing so certain as death and premiums."

HERR HILFERDING, German Finance Minister, to the congress of International Interparliamentary Economic Union.

"A Europe of economic cooperation with fuller and speedier development of its powers of production would at the same time be an enlarged market and a better client for the rest of the world. If I mention this idea before an assemblage representative of much more than Europe, I am able to do so only because I am firmly convinced that this idea does not and must not mean isolation from other nations or even a cleavage in international solidarity. The War itself has shown that, at least in the economic field, there are only vanquished and no victors."

Here lies a great market...
the gateway to the Orient

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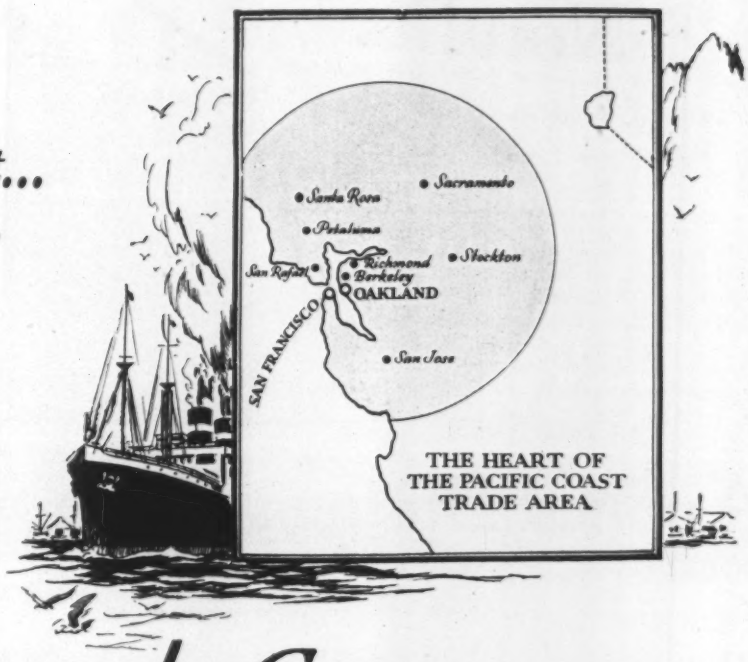
to serve South American Markets



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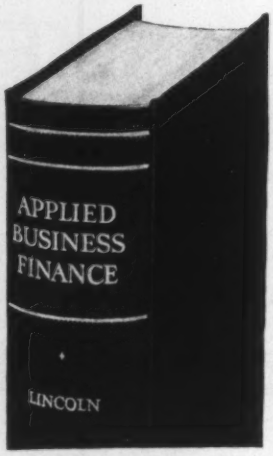

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By EDMOND E. LINCOLN

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Wide Reading

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THE SHENSI TREASURE—COAL. Boris P. Torgasheff. *The China Weekly Review* (Shanghai), August 31. Survey reports by two American engineers estimate China's coal reserves second only to the United States. Economic possibilities in China's present state of transport and mechanical un-development.

FROM BERLIN TO TOKIO. Interview with Dr. Carl Koettgen. *Electrical World*, October 5. The president of German Engineering Society (world's largest and most influential engineering group) on his way to the Tokio Engineering Congress, tells of recent advances in the German electrical industry.

A NATION OF REALTORS. Robert C. Brinkley. *New Republic*, October 9. As the prime symbol of our civilization neither the pilgrim father, nor the pioneer, nor the captain of industry suffices so well as the real estate man to explain certain habits of mind, certain ideals and inconsistencies of the behavior of the American people.

THE INDIVIDUAL MERCHANT AND THE CHAIN. O. Frederick Post. *Electrical Merchandising*, October. "Tips" for the independent merchant on preventing "chains" from becoming a factor in actual competition.

AMERICAN BRANCH PLANTS ABROAD BRING NEW PROFITS. Walter F. Wyman. *Printers' Ink*, October 3. They menace neither American industry nor the American working man.

THE ODYSSEY OF AMERICAN MANUFACTURERS FACES A LEGAL CURB. J. W. George. *Advertising and Selling*, October 2. The case of the American Ulysses who manufactures abroad commodities which, for various reasons, can not be manufactured at home. Fresh rebuttal arguments on a hotly debated question.

ENGLAND LOOKS TOWARD AMERICA. S. K. Ratcliffe. *Yale Review*, Autumn. An English journalist interprets the present psychological relations between the United States and England.

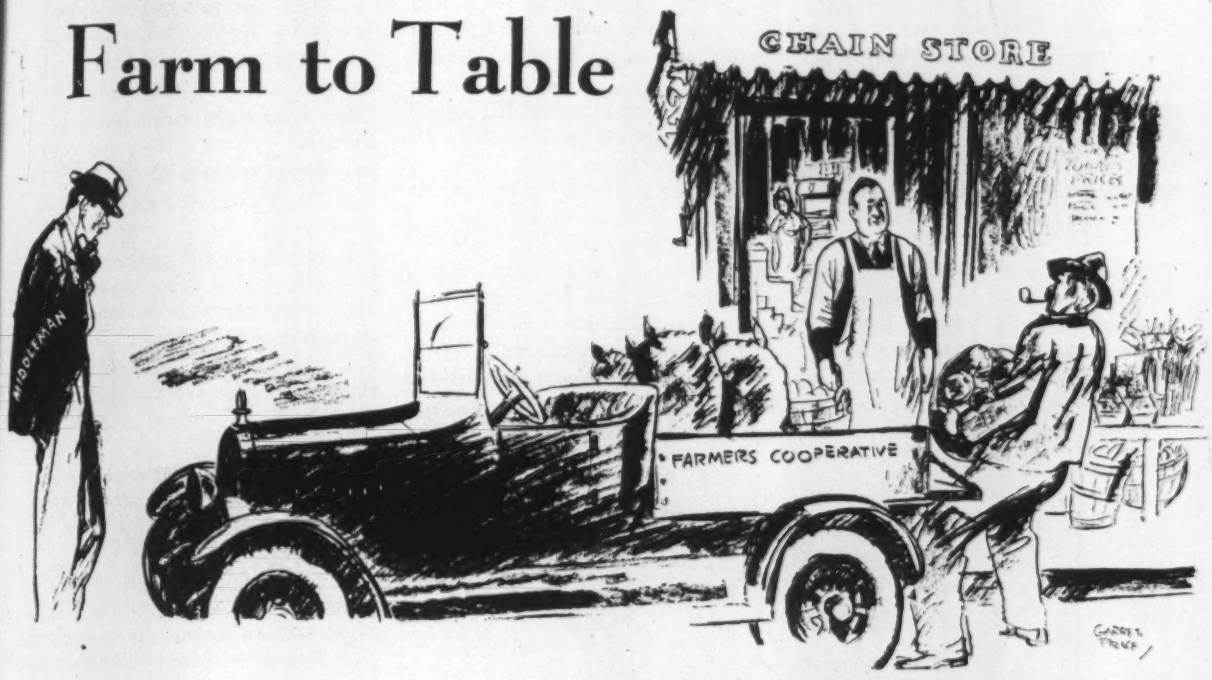
REPORTS—SURVEYS

SELLING NEW YORK CITY GROCERS. William E. Riegal. Research Department, *The New Yorker*. 50 pp., with charts. How to reach the cream of the market. Excellent basis for similar studies in any field and any urban community.

MOTION PICTURES IN ADVERTISING AND SELLING. Edward F. Stevenson. Visugraphic Pictures, Inc., New York. Presentation of the advertising and industrial motion picture as a promotional medium.

SELLING THE MODERN WOMAN. A study by The Blackman Company, New York. What kind of person is this buyer of 80% to 90% of the country's manufactured products? What kind of things interest her? Are her ideas changing?

Farm to Table without a Middle-Man



THROUGH his co-operative marketing organizations the farmer is selling directly to the great chain store systems to a much greater extent than is generally realized—a natural development, since the co-operatives, possessing great selling power, must inevitably seek outlets of great buying power.

Now that the federal government is to lend financial aid to the bigger co-operatives it is extremely probable that such sales will show a tremendous increase. Even under present conditions they are more than keeping pace, in amount, with the growth in numbers of chain stores.

The fact is important—big co-operatives do proportionately more business with the chains than small ones, with a larger profit per unit of sale and greater satisfaction to the member farmers. This is another force toward the eventual merging of the co-operatives, of which there are almost 12,000 scattered through the nation's 3,070 counties, into a comparatively few enormous organizations.

There are many ways in which chains and co-operatives have interests in common. The co-operatives will find the chains useful as channels of distribution. The chains will find the co-operatives dependable as sources of supply. Mutuality of interest should result in less political opposition of farm communities to chain stores and even in active backing of each group by those broad-minded leaders of the other, who can see, behind the natural competitive attitude of buyer and seller, a mutual dependence.

SPECIFIC data gives some idea of the volume of farm produce now marketed via co-operative-chain store routes.

Co-operatives received a large proportion of the $4,612,900.59 which twelve chain companies spent for goods last year in Wisconsin.

Land O' Lakes Creameries, Inc., leading co-operative of the dairy industry, sold last year $46,000,000 worth of butter, of which $30,000,000 went to thirty-five chain store systems. Total marketing cost, ⅓ cent a pound. Usual commission charge, 1 cent a pound.

Pacific Egg Producers, Inc., eastern sales agents for four west coast co-operatives, did a total business last year of $18,000,000. Almost half was with chain stores.

Half the sales of the California Prune and Apricot Growers' Association (Sunsweet products), are made direct to chains.

The Florida Citrus Exchange markets 80% of all grapefruit. Forty per cent of its sales are to chain stores, either direct or through auctions in ten eastern cities.

SUCCESS of the California Fruit Growers' Exchange (Sunkist brand), largest of the co-operatives, indicates the hold which the big marketing organizations have upon the situation. To the Exchange, jobbers and chains look alike. Chain systems buy large quantities of oranges and lemons, but the Exchange handles such an enormous volume that it is unnecessary to grant favors even to the largest chains. The head of an important chain system said that his organization buys Sunkist fruit at the regular auctions, as well as from the Exchange direct, and sometimes pays a premium for it, because American women have been educated by nation-wide advertising to insist upon this brand. There is an indication of what real co-operation, backed up by effective advertising, can do for the farmer.

The other side of the story is seen in the experience of the co-operatives which market vegetables and the general run of produce. These producers are not, as a rule, well-organized; their co-operatives are small. They have little more bargaining power than the owner of a single good-sized farm. Often their administration is in the hands of men with scant knowledge of marketing. These officials are inclined to be fearful of chains; they advise, "Watch the Chains." Even the few good vegetable and pro-

duce co-operatives sell less to the chains than might be expected. This is due in part to the fact that until recently the chain stores have handled no more vegetables than they were compelled to by demand. The principal reason, however, is that individual chain stores buy their vegetables from local farmers and gardeners instead of from the co-operatives.

THE attitude of the chain store systems is thus explained by the chief buyer of the Great Atlantic & Pacific Tea Company's produce warehouse in Chicago, which handles 10,000 carloads of fruit and vegetables a year:

"Price is not the first consideration in buying fruit and vegetables for a chain. What concerns us more is getting quantities that we need regularly and knowing that quality will be uniformly up to standard. Sellers, knowing that the big buyer must get his goods, are often in a position to dictate prices. To protect ourselves, we buy from producers whenever we can if we have to pay a premium for quality merchandise and dependable deliveries. Of the 10,000 carloads which we handle each year, 77% comes direct from producers, mainly farmers' co-operative marketing organizations."

In general, chain stores prefer to buy from the co-operatives for these reasons:

1. Sure source of supply.
2. Direct dealing with persons responsible for quality.
3. Large orders more easily taken care of.

The advantages which accrue to co-operatives through alliances with chains may be thus summed up:

1. They are assured of a responsible outlet.
2. Payment is sure and prompt.
3. The gamble of selling is reduced, which compensates for having to forego an occasional big rake-off.
4. Chain stores adjust flooded markets without going bankrupt or throwing the goods back.

THE farmer has long since learned he cannot afford to be sentimental in finding a purchaser for his product. Anti-chain propaganda has not affected him very much, and he is not troubled by the argument that "the chains take the money out of town." But he is profoundly impressed by the fact that chain stores not only provide a certain market for his produce, but that they will sell him groceries at good prices. He thus tends, gradually but surely, to ally himself with the chain stores as closely as with the mail order houses.

The farmer is learning, too, that if he is to enjoy to the full the benefits of doing business with the chains, his co-operatives must be large. There are two important reasons for this, aside from the advantage of large scale dealings. First, large co-operatives can hire better management; hence their selling is more apt to be done by men who understand markets, prices, supply and demand. Second, they can advertise effectively at a low rate per unit of sale. It is noteworthy that the co-operatives which lead in doing business with chain systems sell brands which have become known to everyone through national advertising.

WHEN a co-operative sells to chain systems the consumer pays only three major costs in addition to the price received by the farmer. They are the cost of operating the co-operative, the cost of transportation, and the cost of chain store markup. The tendency of these three is downward. In time the farmer will undoubtedly get more and more of what the consumer pays. One by-product of cutting distribution costs would be a considerable degree of farm relief.

▼

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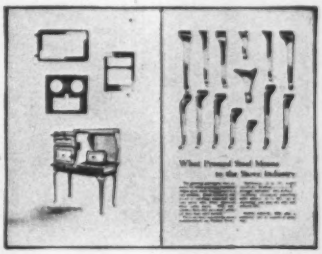

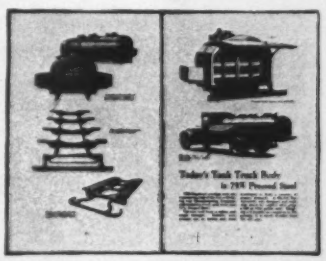

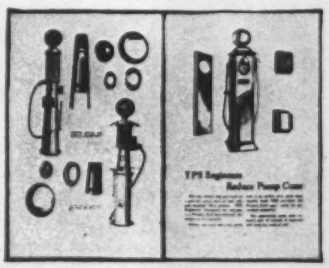

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TREND *and* TEMPO

By Robert R. Updegraff

A NEW "sign of the times" is the "humanist" creed in the religious world. The organization of the "First Humanist Society of New York" took place a few days ago. There are other societies in Los Angeles, Chicago, Dayton, Minneapolis and Louisville. We may see much about "humanism" in the newspapers presently.

In describing the new creed one of its sponsors (the Rev. Charles Francis Potter) explains, "In the challenge to make the world better here and now, the Humanist will find all the incentives and thrills which formerly intrigued the seekers of celestial bliss in the hereafter. Not that the Humanist is necessarily unconcerned with the great problem of immortality. He simply approaches it in another and more scientific way. Heaven as a reward concerns him even less than hell as a punishment. The continuance of personality he believes more likely to find its explanation by scientific research and the study of personality itself than by any revelation from the skies."

This new movement will bear watching. No matter what our own religious views may be, we cannot afford to close our eyes to anything that may be indicative of a broad new trend in any field of human experience or activity.

IN Chicago last week a millionaire who is setting his son up in business told me that he wanted to keep the young man under his wing for about three years. His reason was an odd one:

"It isn't that I want to teach him business," he said, "though I do hope I can give him some valuable slants. But I want to control him long enough to get his avocational habits established. I want to make him take a month twice a year for travel and sports. I believe he will do more and better work, and make more money, in ten months a year than he will in twelve. Certainly he'll get more out of life. But he'll never take two months off unless he gets the habit while he's young. So I'm bossing him for two or three years."

Decidedly worthy of emulation, in my humble opinion.

A TWIN-FACT (if facts can be twins) begins to stand out, it seems to me, above the mass of aviation news and views: that commercial flying service is coming faster than even the optimists thought for, but that individual flying in private planes on any considerable scale is further off than most of us have imagined.

However, don't agree with this unless you do.

TO the New York Central Railroad: Thank you for your new train, The Commodore Vanderbilt. I used it, eastbound, on its fourth trip. A good "business" train, leaving Chicago at an opportune after-lunch hour, arriving in New York equally opportunely an hour before noon. No lunch hours sacrificed. A train in the new American tempo.

I understand the "Pennsy" has a new train—The Golden Arrow—that speeds east on the same schedule.

"BEAUTY does not lie in the face," Jean François Miller once said. "It lies in the harmony between man and his industry."

Millet's paintings are great because they are beautiful, and they are beautiful because they unfailingly portray the people he painted as being in harmony with their industry.

Happiness, too, lies in man's harmony with his industry. Happiness is just another word for harmony. We are in harmony with our industry when our work gives us an opportunity to express ourselves—to do the things we like to do in the ways we like to do them.

PROFESSOR WILLIAM LYON PHELPS says that reading is the cheapest and easiest method of overcoming the limits of time and space.

Respectfully referred to those men who are "too busy to read."

In this Year's ENTERING CLASS

EACH autumn freshmen throng the campuses of America—thousands of them at some of our larger universities—an eager army of young people moved by that keen desire for education that has become a major instinct in modern life.

They are the fortunate ones. But what of the millions of boys and girls who never reach college—the ninety-eight in every hundred who are forced by need and circumstance to drop out along the way? Must they be denied forever the advantages of cultural and technical training that count so heavily toward success?

In answer we would have you look for a moment at another entering class—the *hundred thousand* men and women who will start their studies with the International Correspondence Schools this year.

They are of all ages, all conditions, all degrees of learning. Some are office boys and apprentices in their teens. Some are prosperous, forward-looking executives, coming to us for specialized work in some phase of business or industrial management. The great majority are young men with family responsibilities, bent on winning a higher standard of living.

Forty-five per cent of these I. C. S. students left school by the end of the grades. Forty per cent have had some high-school training, and nearly thirteen per cent, in the most recent analysis, have had the privilege of at least a partial course in college, university or technical school. There are a few who have never had any form of schooling, yet are courageously mastering the rudiments of an education.

It would be a glorious sight—this entering class—if all its members could be assembled for a calling of the roll. But it is more inspiring still to vision them as they actually are, in cities and villages, on farms and ships, in offices and shops and mines—all working earnestly and with a common purpose.

For thirty-eight years the International Correspondence Schools have held out to ambitious men and women an opportunity for education, regardless of their circumstances, their scholastic attainments or the locality in which they live. "The School of the Second Chance," it has been called, and such it has proved itself for nearly four million students. The schools and colleges of America strive to prepare those in their care for useful lives. And the International Correspondence Schools, in their distinctive field, are constantly seeking to improve and extend the practical service which has made them by far the largest educational institution in the world.

If you are interested in learning more about the International Correspondence Schools and their methods of instruction, write for the booklet, "The Business of Building Men."

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EDITORIAL PAGE

THE BUSINESS WEEK—A McGRAW-HILL PUBLICATION

The Tariff Nuisance

NEVER in this generation has this country had to swallow such a strong and distasteful dose of tariff tinkering as it has this year. After months of Congressional wrangling, no end is yet in sight to the uncertainty and dissatisfaction that this unfortunate attempt at general tariff revision has created.

We do not believe that American business as a whole was or is any longer profoundly interested in overhauling the tariff. There have been no general conditions in agriculture, industry or trade that have required or could be remedied by any general increase in tariff rates. On the contrary, the fundamental changes that have taken place in the economic life of the United States and our international position as a result of the war, have clearly made it unwise and untimely to disturb our financial and commercial relations with the rest of the world by any radical and comprehensive alteration of our tariff policies.

Common business prudence and sound statesmanship dictated that in this matter we should have let well enough alone and avoided the risk of re-opening a difficult and dangerous question for which, at best, there is no safe and satisfactory answer.

Having done so, however, we must see it through to the bitter end and profit what we can by our mistake. Some sort of tariff bill must be enacted this year. We cannot have the menace hanging over business and delaying the work of Congress indefinitely. The President, having started Congress maneuvering, like a bull in a china shop, amid the delicate issues involved in tariff revision, has the inescapable responsibility of rescuing as much of our commercial crockery from damage as is possible. The country looks to him now to exercise his leadership to secure as good a tariff bill as can be gotten out of this unfortunate special session, and above all to safeguard business against an early repetition of the recurrent, nerve-wracking nuisance of general revision.

To do this it is essential that he be permitted to appoint, and do appoint, a strong non-partisan tariff commission. Whether or not the power to alter rates is to rest in the end with Congress or with the President, proposals for rate changes should hereafter proceed from a body of impartial experts, chosen for their knowledge of American and world business conditions, secure in tenure of office from political pressure, working in the full light of publicity, and with proper provision for representation of all interests before it.

Business as a whole is more interested in stable, scientific tariff administration than it is in rates. The time has come to take a definite and determined step toward such administration through the establishment of a powerful and unprejudiced agency for it. This is the least that the country has a right to expect from the present legislation, and the President should insist upon it.

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